X

ANNUAL

ADMINISTRATION REPORT

OF

THE FOREST DEPARTMENT,

MADRAS PRESIDENCY,

FOR THE

OFFICIAL YEAR

1880-81.

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FOR 1880-81.

Letter from Colonel R. H. BEDDOME, Conservator of Forests, to the Secretary to Government, Revenue Department (through the Board of Revenue), dated Madras, 11th July 1881.

I HAVE the honor to forward my Annual Report on the administration of the Forests in this Presidency for 1880-81, together with the usual accompaniments relating to statistics of the department.

2. SECTION I.—*Inspection Tours of the Conservator of Forests and the Forest Officers in Executive Charge.*—The Conservator was on tour of inspection in the Malabar Forests from the 1st to the 9th of April 1880.

From the 20th of June till the 6th of July on inspection in South Coimbatore and the Anaimalai Forests.

In July, when tours had been contemplated, he was detained at Ootacamund by orders of His Grace the Governor.

From the 10th of September to the 25th of October he was on tour in Tinnevelly, Madura, and Trichinopoly.

From the 6th to 13th December office inspection at Madras; from 14th to 20th December inspection in Coimbatore forests.

From 28th December to 8th January 1881 inspection of Nilambúr Teak plantations.

From 11th of January to 10th of February inspection in the Kurnool, Cuddapah, North Arcot, and Pálghat forests.

In February and March he inspected the different Nílgiri plantations and forests, and commenced his inspection of the Cinchona plantations and inspected the forests of Mudumallay and the Wynaad.

3. The Conservator's special inspection reports on the Anaimalais, Tinnevelly, and Nilambúr have been reviewed by Government respectively in their Orders, No. 1661 of 7th December 1880, No. 362 of the 23rd February 1881, and No. 784 of the 17th May 1881.

4. Similar reports on Madura, Kurnool, and North Arcot have as yet only been reviewed by the Board in their Proceedings, No. 85 of the 20th January 1881, No. 826 of the 11th May 1881, and No. 946 of the 1st June 1881.

5. The Conservator's reports on Cuddapah, the Nílgiri plantations, and Mudumallay have not yet been issued by the Board.

6. Mr. Brougham was most usefully employed in inspection and selection of reserves in the western taluks of the Kistna District, and submitted a very good report (*vide* Proceedings of the Board of Revenue, No. 891, dated 20th May 1881).

7. Mr. Boileau has been also employed on inspection in the rest of the Kistna District, but orders are as yet not out on his reports.

8. To afford some information as to the time spent by Divisional Forest Officers on inspection duty and in camp, a statement showing the number of days they were absent from their head-quarters is subjoined :—

Name of Officers.	Designation or Rank in the Department.	Name of Division.	Number of Days absent from Head-quarters.		Remarks.
			During 1879-80.	During 1880-81.	
Major Campbell Walker.	Special Deputy Conservator.	Special duty. Settlement of Reserves.	268	Not given.	
Mr. J. W. Cherry ...	Do. ...				
Mr. E. Dampier ...	Ranger ...	Goomsur and Surada.	175	190	
Mr. E. H. Boileau ...	Deputy Conservator.	Godávari ...	Not given.		
Mr. J. H. B. Brougham...	Do. ...	Kurnool	185	88	Also visited the forests in the Kistna District.
Mr. H. H. Yarde ...	Do. ..	Cuddapah ...	160	138	
Mr. T. Sheffield ...	Do. ...	North Arcot ...	164	147	
Mr. H. L. Wooldridge ...	Do. ...	South Arcot ..	244	217	
Mr. G. Hadfield ..	Do. ...	Trichinopoly ...	*28 †20	*23 †134	* By Mr. Gass. † By Mr. Hadfield. Mr. Hadfield was transferred to Nilambúr on the 10th January 1881, Mr. Gass taking charge of this division in addition to Madura.
Mr. H. A. Gass	Do. . .	Madura	164	257	
Mr. W. C. Hayne ...	Do. ...	Tinnevelly ...	‡72 §108	211	‡ By Mr. Hadfield. § By Mr. Hayne.
Mr. A. W. Peet ...	Do. ...	Coimbatore ...	203	...	Absent on furlough.
Mr. R. Williams ..	Do. ...	Anaimalai ...	245	81	Held charge of the Coimbatore Division.
Major R. S. Jago	Do. ...	Nilgiris	116	123	
Head Assistant Collector.	.....	Pálghat	10	12	Three officers (Revenue) held charge of the division successively.
Mr. R. W. Morgan ...	Do. ...	Wynaad	116	132	
Mr. J. Ferguson ...	Do. ...	Nilambúr ...	Not given.		
Mr. Stanbrough ..	Do. ...	Salem	Not given.	144	
Mahomed Ali Saib ...	Sub-Assistant Conservator.	Sub-division, Coimbatore.	155	159	Held charge, during the year, of the Anaimalai Sub-division.
Mr. W. Carroll	Ranger ...	South Canara ...	182	142	Mr. Cherry had charge of the division from 25th May to 23rd June 1880.

9. Major Walker, who was deputed on special duty in selecting forest reserves and defining their boundaries, had charge of his office up to 2nd October 1880, after which date he availed himself of the one year's furlough granted to him. Mr. Gass, Deputy Conservator of Madura Forests, succeeded to the charge without prejudice to his own duties, and, after the completion of the report of the Committee on Madura Division, the Special Duty Office was removed to Salem, where operations were carried on under the orders of the District Forest Officer.

10. From the foregoing statement it will be observed that there have been certain changes in the divisional charge of officers. Mr. Boileau was appointed to the charge of Godávari Forests. Mr. Ferguson being about to retire, Mr. Hadfield, who has a great experience in planting operations, was transferred to Nilambúr Division to study the treatment of teak under Mr. Ferguson.

11. Mahomed Ali Saib, who had charge of the Salem Sub-division, was transferred to the Anaimalai Range, as the services of a Deputy Conservator were not considered necessary after it was amalgamated with the Coimbatore Division.

12. SECTION II-A, "RESERVED FORESTS"—*Godávari Forests.*—Twelve reserves in the Upper Godávari Forests (as shown in the margin) have been finally sanctioned by Government in their Order, dated 8th September 1880, No. 1107, Revenue Department. The total area of the Bhadráchalam and Rékapalle Taluks,

Bhadráchalam Taluk.

Block.	SQ. MILES.
No. I	1
„ II	3
„ III	4
Total ...	8

in which the reservation was made, is about 830 square miles, and the reserved forest area of these taluks is about 8 per cent. of the whole extent. Fire-tracing has been attended to, but no improvement or regular operations can be expected till a working establishment has been entertained.

Western portion of the Rékapalle Taluk, i.e., the old Marigudam Taluk.

Block.		SQ. MILES.
No.	IV	6½
„	V	1½
„	VI	6
„	VII	8
	Total	22

The rest of the Rékapalle Taluk.

No.	VIII	1
„	IX	3
„	X	11
„	XI	3
„	XII	20
	Total	38

13. *Cuddapah.*—There are nine forest reserves in this division, hitherto classed as fuel reserves, but as they contain valuable timber trees, their nomenclature has been changed. The casualties in them were comparatively small owing to a copious rainfall during the year.

14. The Deputy Conservator reports that cattle trespass has been as frequent and injurious as ever, although the Collector of the district had issued stringent orders in the District Gazette calling upon the Village Revenue officials, such as Reddies, &c., to take a personal interest in the protection of the tracts by preventing cattle trespass. The luxuriant growth of grass affords temptations too strong to resist on the part of cattle-owners; arrangements were therefore made to collect a small seigniorage of four annas per bandy-load on all grass cut and removed by ryots from these reserves; this system promises to check trespass to a certain extent, but the improvement of these reserves and others throughout the Presidency will be unsatisfactory until there is a Forest Act; trespassers cannot be arrested; there is no system of passports to check smuggling, and rules and penalties are not properly acted up to or understood.

15. With reference to G.O., dated 21st June 1880, No. 702, Revenue Department, a local committee, consisting of the Deputy Conservator and the Divisional Deputy Collector, Mr. A. Kristna Row, met and inquired into the existing rights of ways, &c., in some of the proposed* reserves, the selection of which was formally sanctioned by Government in the order above quoted. The Sullivendra reserve was personally inspected by the committee in company with the villagers and Reddies of the neighbourhood, who objected to the reservation of the tract on the ground that they have continued to enjoy from time immemorial the privilege of pasturing their cattle and cutting grass in this tract, and that the portion of the jungles allotted to them in lieu for grazing purposes, &c., was insufficient. The committee were of opinion that the villagers had ample grazing ground, not only in the portion allowed to them, but also in the neighbourhood. On the request of villagers the committee recommended that Goondalkonah, where water is procurable in times of great drought, should be excluded from the reserve for the use and comfort of the village communities.

* Sullivendra.
Malliamkondah.
Nainapalle.

16. As regards Malliamkondah Reserve, the committee, on the representation of villagers that they had no other place for pasturage, and that the reserve contained a temple and other sacred places, abandoned the idea of its reservation. No objection was raised by ryots about the reservation of Nainapalle, as they stated that the portions allowed for pasturage were sufficient. The inquiry into the other proposed reserves was postponed owing to the Revenue authorities being engaged in Census work.

17. *North Arcot.*—In this division preliminary selection of five reserves (as per margin) has been carried out, and a committee formed of the Divisional Revenue Officer and the Deputy Conservator has been engaged on inquiries into private rights, &c.

		Area in Square Miles.
No. I.	Sandalwood Reserve	20
„ II.	Thellay do.	20
„ III	Palamathi do.	3
„ IV.	Attimattoor do.	30
„ V.	Carnatighur do.	20

18. The first reserve is the strip of forest taken over from Salem in 1880-81, and contains a great deal of young sandalwood.

19. No. III Reserve was originally 10 square miles, but the Forest Committee, after inquiry into the claims, reduced the area to be reserved to 3 square miles. Nos. II and V are being demarcated roughly; the latter has been proposed by the Collector in lieu of the jungle in the plains between Sandavasal and Pólúr; No. IV, which is a strip of jungle taken over from Salem in 1874, is said to contain a large number of timber trees and sandalwood.

20. *The Napier Reserve* (sanctioned in G.O., dated 30th August 1879, No. 1798) was fire-traced during the year; the general condition of the trees is favorable.

21. *South Arcot.*—During the past year the boundaries of certain jungles in the Tirukoilúr and Tiruvannámalai Taluks, the reservation of which was sanctioned in G.O., dated 26th August 1880, No. 1023, Revenue Department, were settled by the Divisional Revenue Officer conjointly with the Forest Officer.

22. *Madura.*—In this division no forests have as yet been reserved, as orders have not been received from Government on the question of the reservation of certain tracts submitted by a Forest Committee composed of the Collector, Major Campbell Walker, and Mr. Gass, Forest Department, and a Revenue Survey Officer. Forest lands of this district are computed to occupy an area of about 1,098 square miles, of which the committee proposed to reserve 284·69 square miles, as also certain sholas on the Palnis and Uggamalais covering an area of 22·28 square miles. Of the portion recommended to be reserved, about 71·54 square miles of forest belong to the Zemindars noted in the margin, the reservation being necessary to protect the head waters of the Vigay river, but nothing can be done as to these tracts until there is a Forest Act.

Gandamanáyakanúr.
Bodináyakanúr.
Ayakudi.
Yerasakanáyakanúr.

23. *Tinnevelly.*—The line roughly marked out by the Reserve Committee denoting the reserved forests in this division has been approved of by Government in their Order, dated 11th February 1881, No. 257, Revenue Department. The number of reserves proposed by the commission is five, as per margin, and they comprise an area of 286·81 square miles, which is about 50 per cent. of the total forest area of the district. Ambásamudram Reserve is most important in connection with the water-supply of the Támbraparni river, and it also abounds with many valuable timbers not known elsewhere in India.

	Area in Square Miles.
No. I. Nángunéri Reserve ..	... 49 27
„ II. Ambásamudram Reserve	.. 142 20
„ III. Tenkási Reserve	... 28 14
„ IV. Sankaranainárkoil Reserve	... 30·84
„ V. Srivilliputur Reserve .	... 36 36
Total	.. 286·81

24. *Coimbatore.*—The Anaimalai Forests, which were known as the South Coimbatore Division, were amalgamated with the North Coimbatore Division on the 1st April 1880, and the united division is styled "Coimbatore Division." In the matter of the demarcation of the three reserves constituted in the Anaimalais in 1879-80 the line from Vengoli to Umiamalay, a distance of five miles, and that from the former to Calianapandal, a distance of three miles, were cleared in No. I or Anaimalai Reserve, and a trench around the nunjah land of the Poonachy village, situated within the No. II or Poonachy Reserve, was also cut by the department.

25. In the third reserve no operations were carried on to complete the demarcation during the year.

26. Mr. Cherry, whilst in charge of the division, examined about 70 square miles of sandalwood tracts in Hassanúr, Tallamallai, and Malakad in the Satyamangalam Range with a view to select portions for reservation; but as he did not meet the Revenue Officer, nothing resulted from his inspection, and no tracts were reserved. Mr. Peet is now (June 1881) employed on this important work, and the Collector of Coimbatore has taken it up with him.

27. No felling operations were carried on in the sub-division, but about 460 maunds of gallnuts and 1⅛ maunds of cardamoms were departmentally purchased from hill tribes, who collect for the department.

28. The great deficiency in timber stock of the sub-division reported last year by Mr. Williams was not correct; a separate report has been submitted through the Revenue Board on this subject; if the Deputy Conservators in charge had periodically inspected the depôts and paid ordinary attention to the entries in the timber register, there would have been no confusion or mistakes; it is now necessary to remeasure and value the whole stock depôt by depôt; this was ordered in July 1880 by the Conservator, but it has not yet been properly carried out.

29. In the Bhaváñi Range timber was felled on the Katrimallay hills and sandalwood roots dug on the Madaisvaram and Bargúr hills. There was a collection of sandalwood roots also in Kollegál Range.

30. Agreeably to G.O., dated 2nd August 1879, No. 1612, a tax of two annas per head was levied on cattle allowed to graze on the Anaimalai hills, and the collections under this head amounted to Rs. 1,330-8-6, which will certainly be augmented in future years.

31. Government in their order above quoted having permitted the department to collect minor forest produce by the agency of the hill tribes, several bazaars were established to supply provisions to these people and to receive the various produce collected, the value being calculated according to certain fixed rates prescribed by the Deputy Conservator.

32. This system is advantageous to the department as well as to hill tribes, who seem to be quite satisfied with it. A Forest Ranger is specially deputed to supervise the work.

33. *Nílgiris.*—The boundaries of the reserved forests known as Mudumallay and Beni were demarcated and surveyed, and the area of the former was entered at 74 and the latter at 17 square miles.

34. The working of these forests has been closed just for the present, chiefly because there was a large supply of felled teak and little demand, and partly because the teak requires rest; the very large demand which has lately sprung up at the gold fields of Devála will create a large and steady demand on these tracts if the mining continues a success; and the superior jungle timbers will also be in great request, the Vengay and Kara Mardu being better timbers than many now in use for the tunnels, &c.

35. The Sígúr Forests (estimated area about 40 square miles) are treated as a reserved forest with regard to sandalwood and teak, &c.

36. Almost all the woodlands on the Nílgiris have been ordered by Government to be reserved. Maps of the different nâds appertaining to the Nílgiri District are under preparation by the Survey Department, and on completion of these and the settlement work treated of in the Board's Proceedings, dated 10th January 1881, No. 13, conservancy will be much more systematic and satisfactory.

37. Felling operations in the sandalwood tract have been recommenced; 602¼ maunds were collected and sold during the year.

38. *Salem.*—The Reserve Commission is now at work in this division, and the work of reservation will be completed before the close of 1881-82. The sandalwood tracts on the Mailaghirry hills are in the meantime strictly reserved.

39. *Pálghat.*—The demarcation and survey of the Chenat Nair Forests was completed during the year.

40. There were, however, some disputes of neighbouring landholders, chiefly on the Kallodi Code (Walawanád) side. The Pálghat Rajah has just forwarded a claim which, if admitted, would deprive the department of nearly half the Elivali hills. The Assistant Collector in charge of the division recommends that these disputes should be finally adjusted by an officer invested with the powers of a Collector under Act XXVIII of 1860.

41. The reserve has been worked departmentally and the collection of minor forest produce rented out.

42. *Wynaad.*—During the year a boundary of 16 miles in the cardamom tract and 10 miles in the Padry Forests have been cut at a cost of Rs. 339-3-0. In the Coodracote Forests a line, 7 miles long, has been surveyed at a cost of Rs. 11-8-0. The Deputy Conservator gives a long account of the contemplated operations in his division relating to the boundary settlement, felling and transport of timber, &c. These proposals for the coming year ought not to find place in an administration report, which is supposed to treat briefly on all subjects of importance that have transpired during the past year.

43. During the year 19,688 cubic feet of Teak and Mutty timber were felled for Mysore merchants, and 12,600 bamboos were supplied to ryots. There was also some small collection of wax, honey, and cardamoms during the year.

44. *South Canara.*—Fire-paths have been cut in the Pillar Khan Reserve, and all the dead wood removed. The long-standing claim of one of the Udipi Swamies for a portion of the reserve has been decided in favor of the department on a second appeal which was made to the High Court at Madras. In the matter of the demarcation of the "Harris" jungles only 14 miles of forest were demarcated at a cost of Rs. 184-12-5. It was originally proposed to demarcate 100 square miles during each year, and the very small work done during the year is reported to be due to the Revenue subordinate officers having been chiefly engaged in the Census work and the boundary settlement between Mysore and Canara.

45. No further decisions on investigation of claims than those mentioned in G.O., dated 13th January 1879, No. 78, have been received from the Collector, and the utility of keeping up the establishments entertained by the Collector for forest settlement in this district is very questionable.

46. The question of improving the revenue to be derived from cardamoms in the ghât forests is receiving attention.

47. Much smuggling of timber is said to be carried on in the demarcated portions of forest, and it is chiefly due to Village Potails themselves being proprietors of sandalwood stills, against whom evidence is not easily forthcoming.

48. The total reservation in the several divisions which have been noticed above covers an area of about 806 square miles. The work of settlement was partly carried on by district committees consisting of the Forest Officer and a Divisional Revenue Officer, and partly by the Special Duty Deputy Conservator, aided by the Local Deputy Conservator, and a Revenue Officer.

49. The Special Duty Deputy Conservator commenced his operations of the year in Madura, being stationed with the other officers of the committee at Shembaganur on the Palnis. The work in the district being more difficult than other districts owing to the isolated nature of forests interspersed with cultivation, the committee were engaged in their field-work up to 9th September 1880. The Special Forest Officer was afterwards transferred to Salem District, where the work is now progressing.

50. In the divisions noted in the margin departmental felling operations were carried on during the year, and the subjoined abstract will show the quantities and different description of forest products felled and sold during the year compared with the results of the previous year.

Ganjam.	Coimbatore.
Cuddapah.	Nílgiris.
North Arcot.	Salem.
South Arcot.	Pálghat.
Madura.	Wynaad.
Tinnevelly.	Nilambur.

Description of Timber, &c.		Timber, &c.							
		Felled.				Sold.			
		Quantity.		Value.		Quantity.		Value.	
		1879-80.	1880-81.	1879-80.	1880-81.	1879-80	1880-81.	1879-80.	1880-81.
				Rs.	Rs.			Rs.	Rs.
Teakwood	Cubic feet ..	43,116	42,972½	26,225	34,394	30,435	96,412	35,723	1,02,749
	Logs or No	..	...			19,844	31,963	19,593	
	Saplings No.	16,950	22,016				C.1.561		
Ebony or Blackwood.	Cubic feet .	668		265	.	122	3,506	56	2,506
Rosewood ...	Do. ..	..	1,287½	...	1,237	475	6,315	305	5,413
Sandalwood ...	Maunds .	7,937	11,866¾	25,615	33,262	9,057	8,933¼	39,223	38,265
Redwood	Tons ..	2,859	2,400	38,923	33,256	2,859	2,400	47,679	40,715
	Maunds ..	1,615	...			1,615	..		
	Lbs. ...	...	...			...	..		
	Posts or No	...	195			.	189		
Other junglewood used as timber.	Cubic feet ..	60,861	58,057	38,718	26,404	62,612	97,526	36,473	32,194
	Saplings No.	502	..			...	.	.	
Railway fuel and fire-wood.	Tons ..	1,234	1,532½	3,297	6,370	1,422	2,953¾	6,578	11,356
	Pieces ...	...	52						
	Cart-loads ..	...	5,398						
Bamboos . ..	Cart-loads	16	196½	2,403	1,483	62	207	2,271	2,056
	Head-loads.	...	...			...	...		
	Ass-loads ..	.	.			...	.		
	No. ..	35,389	51,753			31,538	51,404		
Forest produce ...	Maunds ...	2,311	6,633 11/16	3,549	5,626	2,795	512	6,061	10,880
	Lbs. ..	...	2			...	2		
	Cart-loads	...	15			...	15		
	Rotts. ..	.	195			... .	189		
	Thols. ..	237	801			90	146¼		
	Measrs. . .	. .	.			...	148		
	Cottahs ...	...	62			...	106		
	No. .	...	3,800			...	3,800		
	Tins ...	...	. .			...	5,355¼		
	Total ...	...	...	1,38,995	1,42,032	. .	...	1,93,962	2,46,134

51. From the above it will be observed that the total valuation of timber, &c., felled or removed during the year amounts to Rs. 1,42,032, and compared with that of the previous year it shows a small increase of Rs. 3,037, which does not call for remark, but the valuation of certain descriptions of timber, &c., varies largely compared with that of 1879-80 as shown below :—

	Rs.
Total valuation of timber felled during the year 1879-80	1,38,995
Do. do. 1880-81	1,42,032
Increase of Rs. . .	3,037

Increase or Decrease in Valuation compared with that of 1879-80.

Teak	+	8,169
Sandalwood	+	7,647
Red wood	—	5,667
Other junglewood used as timber	—	12,314

52. The increase under Teakwood is chiefly in Nilambúr, where a very large quantity of saplings valued at Rs. 20,000 have been felled during the year in the ordinary course of operations. The revenue realized by the sale of saplings in the year amounted to Rs. 28,172.

53. The increase under Sandalwood is due to permission having been granted by the Conservator to collect this product in the Nílgiri Division, where operations had been temporarily suspended, and to a larger collection of roots having been made in the Coimbatore Division.

54. The decrease in the value of Redwood collected during the year is nominal, as a large quantity of wood collected in North Arcot during the year, which has been paid for in advance by merchants in 1879-80, was transferred to the accounts of that year.

55. The decrease under Junglewood is chiefly in the Goomsur and Suradá Forests, where the felling of Sâl wood was reduced on account of the demand from the Madras Harbour Works having ceased.

	Rs.
Teak	+ 47,433
Ebony or Black wood and Rose wood ..	+ 7,558
Red wood	− 6,964
Jungle wood	− 4,279
Railway fuel	+ 4,778
Forest produce	+ 4,819

56. Under Sales there is a net increase of Rupees 52,172 in the value of timbers, &c., sold during the year compared with the figures for 1879-80, and the variations in the several items which make up the increase are as shown in the margin.

57. The very large increase under Teak is spread in the divisions of Coimbatore, Wynaad and Nilambúr. In Coimbatore a large stock of wood was sold at reduced prices in the Ponáni and Coimbatore depôts to clear away old stock. In Wynaad a large quantity was sold to Mysore merchants, the demand from Railway in that province having been great. In Nilambúr there was an unusually large increase in the sale of teak and saplings owing to a brisker demand.

58. The increase under Black wood, Rose wood, &c., is partly in Nilambúr for reasons stated in the last para., and partly in Coimbatore owing to Mr. Cherry, who had charge of the division for a short time, having sold a good quantity of wood by public auction at a small profit of two annas per cubic foot.

59. The decrease under Red wood and Jungle wood is for the reasons stated under "Fellings and Removals," paragraphs 54 and 55 *supra*.

60. The increase under Firewood, which is spread in North Arcot, Coimbatore, and Nílgiris, is not explained by the Divisional Officers concerned.

61. The increase under Minor Forest Products is in Madura and Tinnevelly. In the former division a very large collection of gallnuts was made and sold during the year, and in the latter the collection of forest produce having been farmed out to private contractors in the three northern taluks of the district, the revenue therefrom has increased.

62. SECTION II-B, "FUEL RESERVES"—*North Arcot.*—Ambúr and Mámandúr are the only two reserves in this division. Felling of Railway fuel has been carried on, and the seigniorage of wood supplied amounted to Rs. 3,979-14-9. Want of proper roads has impeded the supply.

63. *South Arcot.*—There are now fourteen reserves in this division aggregating 103,767 acres, and the principal operations carried on in them during the year were clearing 18 miles of patrol paths, repairing $7\frac{1}{4}$ miles of fencing, and clearing of creepers and other noxious plants to help the growth of trees.

64. During the year fires have been on the whole an exception. The season having been favorable, a large quantity of seeds was sown and dibbled in under the personal supervision of the protective establishments. The general condition of the reserves is reported to be on the whole very good, and the demand for firewood increasing.

65. *Trichinopoly.*—There are six fuel reserves in this division, consisting chiefly of Babool (*Acacia Arabica*) and Kurkapille (*Inga dulcis*), supplemented by artificial planting.

66. In the Lálápet Reserve about 72 tons and in the Streepurandam Reserve 17 tons of *Acacia Arabica* were felled and sold during the year.

67. *Madura.*—The reserves in this division amount to six, as shown in the margin. These have not been surveyed by the Survey Department, so their area could not be correctly ascertained. The condition of the Goovanooth Reserve is reported to be least satisfactory, and it will be abandoned as proposed in the last annual report. As regards the two

No. I. Goovanooth or Sirumalais.
„ II. *Kanavoputty.*
A. Ukkamakaradu.
B. Kaperamkuttu.
No. III. *Iyaloor.*
A Sundamalais.
B. Thanmkaradu.
No. IV. Karandamalais.

reserves at Iyaloor, the growth is said to be poor, but the other three are considered to be excellent and improving. Mr. Gass reports that he had made an attempt to come to some terms with the South Indian Railway to supply firewood; but the price offered by the Company having been very low, he gave up the idea of working the reserves for the fuel supply at present.

68. *Tinnevelly.*—The reserves in this division are the same in number as they were last year. Contracts were given to private parties for the removal of fuel; some have terminated, while the rest are being worked out. The expenditure (working charges) on seventeen of the reserves has been recouped. The total revenue realized from the reserves up to date, together with the value of trees standing in them, is likely to cover the working expenses and establishment charges as shown in the margin.

	Rs.	A.	P.	Rs.	A.	P.
Total receipts up to date	14,634	0	3			
Value of trees standing in the reserves	5,536	12	0			
				20,170	12	3
Deduct.						
Working charges up to date.	11,811	1	0			
Establishment charges ...	5,625	0	0			
				17,436	1	0
Balance ...				2,734	11	3

69. The Deputy Conservator proposes to arrange for their transfer to the Revenue Department next year, as he has not time now to give them proper attention, and the Collector of the district strongly supports this proposal.

70. *Coimbatore.*—A fire-path consisting of 14,935 lineal yards of 10 feet was cut in the Sholakarray Reserve during the year. The proposed extension of the reserve by purchasing 577 acres of land from the Perúr Devastanum Committee has not yet been carried out. Nothing has been said by the Deputy Conservator about the Mettupálaiyam Reserves, whose area is about 19 square miles. The total expenditure on these reserves during the year amounts to Rupees 564.

71. *Salem.*—There are now thirteen reserves in this division, the Thogarapalli Reserve having been handed over by the Revenue Department during the year; it is situated at a distance of 14 miles from the Sámalpati Railway Station on the road to Krishnagiri.

72. There were no felling operations in these reserves during the year, owing to the Railway Company having procured their fuel from private jungles at lower rates than those prescribed by the department.

73. In Marroor, Pilapalli, Kuriappakombay an acre of land was ploughed in each reserve, and different kinds of seed sown broadcast, but the germination was not good, except in the last reserve above mentioned; and in Vadugamputty about 11,000 pits were dug and dibbled with different kinds of trees, and even this method was not successful owing to failure of rain.

74. Kanjary Reserve was formed into a close reserve, having been surveyed and demarcated.

75. *Pálghat.*—The Wallair Reserve, which has been completely surveyed and mapped, consists of two blocks connected by a narrow neck of land. A piece of land in the angle, made by the boundaries of the two blocks, which is owned by a native landlord, is being negotiated for purchase. Felling and removal of fuel, which was entrusted to a contractor, was carried on very slowly. The total quantity removed was only 156 tons, but timber operations in this reserve were more successful; the crooked stunted teak was felled in blocks at Poolampara and Warlipadi, and the outturn was 561 cart-loads, which fetched Rupees 8 per cart free of felling charges.

76. Cattle have been kept out from the reserves, but unfortunately a fire broke out, which remained burning for two days, though there was no serious damage. The Assistant Collector in charge reports that he has now cleared a fire trace of 15 feet wide to guard against fire from the side of the Railway. The subjoined abstract shows the area of the fuel reserves of each division, their stocking, expenditure, and receipts during and up to the year.

Divisions.	Area in Acres.													Expenditure.			Receipts.		
	At the end of the year.							Equal to fully stocked.											
	Bare.	⅕	⅖	⅗	⅘	Full.	Total.	Bare.	⅕	⅖	⅗	⅘	Full.	Total.	In the year.	Up to year.	Total.	In the year.	Up to year.	Total.
North Arcot ...	997	300	200	100	1,000	3,020	5,617	...	60	80	60	800	3,020	4,020	155	7,006	7,161	3,980	50	4,030
South Arcot ...	11,939	2,883	40,982	17,000	...	5,011	103,767	...	5,767	16,392⅘	16,200	...	5,011	37,370⅘	*2,366	26,749	29,115	6,225	19,251	25,476
Trichinopoly ...	772	958	330	*325	509	1,282	4,176	...	191⅗	132	195	407½	1,282	2,207⅘	786	12,143	12,929	590	4,112	4,702
Madura	...	13,440	...	.	...	...	13,440	...	2,688	.	...	...	...	2,688	180	†1,934	2,114	...	3,791	3,791
Tinnevelly	4,121	...	...	1,230	...	404	5,755	..	...	...	738	...	404	1,142	148	11,660	11,808	1,934	12,700	14,634
Coimbatore	...	...	...	13,170	...	...	13,170	...	...	...	7,902	...	...	7,902	564	18,538	19,102	...	4,279	4,279
Salem	1,819	2,600	1,994	1,752	1,610	1,511	11,286	..	520	797½	1,051½	1.288	1,511	5,167½	1,899	30,141	32,040	203	7,193	7,396
Pálghat	290	300	400	500	500	1,000	2,990	...	60	160	300	400	1,000	1,920	285	50,393	50,678	5,327	6,748	12,075
Total ...	19,938	46,433	43,906	34,077	3,619	12,228	160,201	...	9,286⅗	17,562⅘	20,446⅕	2,895⅕	12,228	62,418⅘	6,383	158,564	164,947	18,259	58,124	76,383

* Rupees 690 added by Mr. Wooldridge as being the cost of Manager and Gumastah in charge of Gingee Reserve was omitted, as similar charges of previous years are not included.
† The difference between this and the total expenditure, according to the last year's report, represents certain items of proportionate establishment charges erroneously included in that year.

77. From the above it will be observed that the total area of all the reserves amounts to 160,201 acres, and, compared with the area according to the report for 1879-80, it shows a net decrease of 2,189¼ acres as shown in the margin, and it is spread in the divisions noted in the margin. The decrease in Cuddapah is, as already said, owing to the reserves which are no longer fuel reserves having been omitted under this section. The increase in South Arcot is due to the new reserves noted in the margin having been added to the list during the year, and to an additional area of 7,004 acres having been found by actual survey to belong to Gungavaram and Tiruvannámalai Cusbah Reserves. The decrease in Madura is the area of tank-bed reserves transferred to the Revenue Department in 1879. The decrease in Pálghat is owing to the correct area of the Walliar Reserve having been ascertained by survey.

	ACRES.
Area as per annual report for 1879-80 ...	162,390¼
Do. do. for 1880-81 ...	160,201
	− 2,189¼

	ACRES.
Cuddapah	− 33,281
South Arcot	+ 36,004
Madura	− 3,900
Pálghat	− 1,012¼

	Area in Acres.
Tandrampet	11,500
Nattannur	9,500
Katcherayapoliem	8,000
Total ...	29,000
Add increased area of certain reserves ...	7,004
	36,004

78. Under the column of area equal to fully stocked there is a large decrease of 13,736¾ acres as shown in the margin. The main cause of this decrease is the fact that the thickly-grown jungles of Cuddapah have been transferred from "fuel reserves" to "forest reserves," to which class they really belong, and to a large area being transferred or added to the reserves in the South Arcot forests, in which the "stocking" is not proportionately great.

	ACRES.
1879-80	76,154⅘
1880-81	62,418⅘
	13,736⅘

79. The total expenditure during the year incurred in the upkeep and maintenance of the fuel reserves amounted to Rupees 6,383, and on comparison of the same with the amount spent in 1879-80 a nominal decrease is observable, and it is chiefly due to what has been said about Cuddapah. The variations in other divisions being small, no remark is called for.

80. The total expenditure of all the reserves up to year, *i.e.*, the commencement of 1880-81, according to the foregoing abstract is Rs. 1,58,564, whereas the amount entered in the statement for 1879-80 as the total expenditure (up to the end of that year) is Rs. 1,96,103, and the difference is made up by the total expenditure of the Cuddapah Reserves (Rupees 35,943), and the proportionate establishment charges, amounting to Rupees 1,596, erroneously debited to the Madura Reserves in the accounts of previous years, when similar items do not appear in the accounts of other divisions. The total revenue realized under this head during the year amounts to Rupees 18,259, which shows a great improvement over the revenue of the previous year.

	RS.
Total expenditure up to the end of 1879-80 ...	1,96,103
Total expenditure up to the commencement of 1880-81	1,58,564
	37,539

81. The difference under the total receipts up to year compared with those exhibited in the previous year's report is due to the causes explained in the last para.

82. SECTION II-C, PLANTATIONS—*Cuddapah.*—The growth in the Red Sanders plantation is very promising, and the casualties in the fuel plantations were very few during the year. The expenses relating to the maintenance of these plantations chiefly consisted in repairing the huts of watchers and the payment of the wages of permanent maistries and coolies who were engaged for watching, and for repairs of fences, &c., whenever necessary. Seeds of Mahogany and Rubber (*Ceara*) have germinated fairly. Inga Saman was a complete failure.

83. *North Arcot.*—The Deputy Conservator reports that the planting season from August to October having been favorable, he planted out 360,700 casuarina plants in the three plantations noted in the margin, but the north-east monsoon not being favorable there have been many casualties.

Tiruvallam.
Keelmiunel.
Virinjipuram.

84. Ammerdy plantation, which was felled in 1879, has made good growth from coppice. The *Cassia florida* coppice is excellent, as the trees are not touched by goats or wild animals, and grow very rapidly from the stool.

85. *South Arcot.*—The area of the Veyloor plantation has been increased to 220 acres owing to 81 acres of land having been added to it during the year. An extensive area of the Multarbed plantation being unplanted, and Government having, in paragraph 10 of their Order, dated 29th July 1878, No. 1,189, directed curtailment of departmental planting, it has been arranged to give away some portions of the land to ryots, not on putta, but under sevoyjumma, on condition that half the area of such land occupied by them be grown with firewood and given over to the department well stocked at the expiry of their term, which will not exceed five years. If in the mean time the land is required by the department, it will be vacated by the ryots. During the year 2,195 living trees were felled from Multarbed and Pooniar plantations. The trees felled in the former were chiefly among the plantings of 1873. The yield was fair on the whole. The "Chinna" plantation of Trivanellore, which contained 1,367 trees of 9 inches and above in girth, was clean felled, and the yield was 162 tons. Taking into consideration vacancies caused by floods and droughts in 1874 to 1876, the Deputy Conservator estimates the yield at 24 tons per acre, which promises well for future plantings in suitable low-lying lands in this tract. The total revenue from these plantations realized during the year amounts to Rupees 1,493.

86. *Trichinopòly.*—During the year an extent of 76½ acres was planted in the plantations noted in the margin chiefly with *Casuarina equestifolia.* In the Elamanúr plantation 323 tons of casuarina wood were felled and sold with some *Inga dulcis* wood for Rupees 997-14-8. The chief operations carried on in these plantations have been preparing beds for sowing seeds, repairing fences, dibbling in seeds or transplanting, and replacing casualties.

	ACRES.
Manattattai	15¾
Pudur	1
Kolamanikkam	15½
Aramanaikkurichi	5¼
Karaipakkam	9⅝
Tiruvenganur	18¾
Sattambadi	5
Ammgarampettai	5⅝
Total ...	76½

87. The total charges of maintenance and improvement of all these plantations during the year have amounted to Rupees 2,141, against which a total revenue of Rupees 2,632 was collected from the sale of fellings and thinnings.

88. *Madura.*—The two teak plantations known as Velancombai and Vannathiparai do not promise well, and no expenditure was incurred during the year either in their protection or conservancy. The Kodaikánal plantation, which is divided into Eucalyptus and Acacia plantations was thinned out, and the wood valued at Rupees 469 collected for the Kodaikánal depôt. The condition of the Eucalyptus plantation is reported to be very favorable.

89. *Coimbatore.*—The Bylore sandalwood plantation exhibits promising growth. 52,145 square yards were weeded, 270 plants put out, about 10 acres of trees pruned, and fire-paths around the plantation were cut.

90. The expenditure on the Talamalai sandalwood plantation has been reduced to a minimum. Fire-paths were cut at a cost of Rupees 4-2-0. The total number of acres in these two sandalwood plantations amounts to 177, and they are supposed to contain 174,445 trees.

91. *Nilgiris.*—The growth in the Beni and Mudumallay teak plantations is not

favorable. They were fire-traced at a cost of Rupees 148-14-0, but no other expenditure incurred.

92. The Sembrageddy sandalwood plantation at Sígúr was thoroughly weeded and fire-traced. The growth continues to be good and promising.

93. All the Australian plantations were fire-traced during the year. Eucalyptus to be treated as coppice in the Governor's shola plantation was cut for fuel and realized a revenue of Rupees 2,059. The stools have been carefully trimmed and have thrown up good coppice, which should be fit for felling again in four or five years.

94. The Chemanguli plantation, which was opened in 1879-80, suffered heavy casualties from drought, and the trespass of Toda buffaloes causes great damages, and is not easy to check, as the animals are too wild to be caught. Nineteen nursery beds were formed, 25,000 blue gum plants were replanted, and 33 acres were weeded twice.

95. A new plantation known by the name of Muttinad was formed during the year. About 40 acres were cleared of under-growth, nurseries were formed, and 47,000 pits dug and planted with Eucalyptus globulus plants.

96. Fourteen acres in a cleared portion of the Devi Shola were planted with Eucalyptus.

97. Of the plantations on the Wellington and Coonoor side, those noted in the margin are fit for felling, but there is unfortunately little or no demand for the wood either as fuel or timber.

Bleakhouse (a portion).
Rallia.
The old forest.

98. In the "old forest" 709 cart-loads of firewood were felled and realized Rupees 1,174-4-6. The stools have been carefully trimmed and have thrown up good coppice.

99. The general condition of the other plantations near Wellington and Coonoor is good.

100. *Salem.*—The cost of the upkeep of the Kanavinagasamudram sandalwood plantation has amounted to about Rupees 100 during the year.

101. *Nilambúr.*—During the year no extension was made to the teak plantations in this division. 1,982 acres of the planted portion were weeded, 76,430 saplings were felled, and other routine operations carefully carried out; the growth of the teak continues to be all that can be desired.

102. The growth of the exotic trees, ceara rubber, castilloa and mahogany, is very favorable, and has been specially reported on during the year both by the Conservator and by Mr. Cross (the original collector of the South American Rubbers).

103. *South Canara.*—The teak plantation at Parappa is reported to be much over-grown, and to be much in need of attention, but it is hardly expedient now to spend money on it until it is decided whether the land belongs to Government or not. The Conservator cannot understand the long delay in settling this question; the tract in question has been a long time in the possession of this department, as the planting of the teak commenced about twenty years ago, and about 10,000 rupees have been spent on it.

104. The total area of all the plantations, inclusive of extensions made during the year, amounts to 8,819$\frac{1}{10}$, acres, and the classification thereof, according to the description of trees contained therein is as shown in the margin.

	ACRES.
Timber	3,814$\frac{3}{4}$
Mixed	1,227
Firewood	3,687$\frac{37}{40}$
Experimental	90$\frac{1}{4}$

105. The following abstract will show the acreage of plantations in the several divisions, their expenditure and receipts during and up to the end of the year.

Name.		Area planted.			Area according to Class.					Expenditure.			Receipts.		
Division.	Range.	In the year.	Up to last year.	Total.	Timber.	Mixed.	Firewood.	Experimental.	Total.	In the year	Up to last year.	Total.	In the year.	Up to last year.	Total.
		ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjam	Goomsur and Suradá ...	...	3½	3½	...	...	...	3½	3½	33	395	428	...	...	...
Cuddapah ...	Cuddapah	...	982	982	...	...	932	50	982	473	43,830	44,303	16	475	491
North Arcot ...	North Arcot	...	*1,060⅛	1,060⅛	...	...	1,035⅛	25	1,060⅛	4,359	56,106	60,465	2,359	27,681	30,040
South Arcot ...	South Arcot	...	583	583	...	...	571¼	11¾	583	921	39,860	40,781	1,492	1,233	2,725
Trichinopoly ...	Trichinopoly ...	76½	†1,059	1,135½	...	...	1,135½	...	1,135½	2,141	49,213	51,354	2,632	11,609	14,241
Madura	Madura	...	22	22	8⅛	...	13⅞	...	22	210	4,724	4,934	469	26	495
Coimbatore ...	Coimbatore	2¾	199⅜⅒	202½⅒	202½⅒	...	...	...	202½⅒	1,302	47,749	49,051	...	...	...
Nílgiris ...	Mudumalay	...	101	1,349½	122½	1,227	...	...	1,349½	6,487	65,111	71,598	3,626	33,005	36,631
	Sígúr	...	‡21½												
	Ootacamund and Coonoor.	54	1,173												
Salem	Salem	...	5	5	5	...	...	...	5	100	2,445	2,545	...	1	1
South Canara ...	South Canara	...	109	109	109	...	...	...	109	28	10,261	10,289	...	...	...
Nilambúr ...	Nilambúr	...	3,368	3,368	3,368	...	...	...	3,368	15,816	3,67,164	3,82,980	28,173	2,07,511	2,35,684
	Total ...	133¼	8,686¼⅒	8,819¾⅒	3,814¾	1,227	3,687¼⅒	90¼	8,819¾⅒	31,870	6,86,858	7,18,728	38,767	2,81,541	3,20,308

* Exclusive of 9 acres, being the area of Thengal plantation abandoned in 1879-80. † Includes 3 acres omitted in last year's report. ‡ Surveyed.

106. From the above it will be observed that the total number of acres extended by planting amounts to 133¼ acres, and it is distributed in the divisions noted in the margin.

	Acres.
Trichinopoly	76¼
Coimbatore	2¾
Nilgiris	54

107. The total expenditure of all the plantations incurred during the year amounts to Rs. 31,870, and compared with that of 1879-80 it shows a decrease of Rs. 4,546 as shown in the margin, and it is chiefly due to diminished expenditure in the Nilambúr plantations, where Rs. 15,816 were spent during the year against Rupees 21,525 of 1879-80.

	Expenditure. Rs.
1879-80	36,416
1880-81	31,870
Difference ...	4,546

108. The improvement in revenue over that of the previous year is generally due to some of the plantations being fit to be felled to meet local demand.

109. Section III—*License and Voucher System.*—The subjoined abstract shows the quantities and the amount of seigniorage realized by the removal of different description of timber, &c., compared with the results of previous year:—

Description of Timber and other Produce.	Measurement or Quantity.	Quantity. 1879-80.	Quantity. 1880-81.	Amount realized. 1879-80. Rs.	Amount realized. 1880-81. Rs.
Teak	Trees	...	9	...	45
	Cart-loads	...	...		
Black wood	Trees	2	...	10	155
	Cubic Feet	...	...		
Other jungle wood ...	Cubic Feet	3,14,535	677,493¾	51,635	83,721
	Trees	...	50		
	Bandy-loads	1,399	1,281		
	Posts	...	139		
	Head-loads	...	75		
Firewood and Railway fuel	Tons	33,609½	49,485	54,523	63,644
	Bullock-loads	...	47		
	Cart-loads	...	5,065		
	Head-loads	...	37,893		
Charcoal	Tons	3,329½	2,179	10,180	9,267
	Cart-loads	...	1,024		
	Head-loads	610	95		
Bamboos	Cart-loads	46,838	55,565⅜	34,153	43,308
	Number	3,036	14,261		
	Head-loads	199	2,974		
Forest produce ...	Maunds	148,846	132,826	23,524	31,928
	Cart-loads	228	2,314		
	Head-loads	401	330		
	Total ...	...	...	1,74,025	2,32,068

110. The total revenue realized under the License and Voucher System during the year compared with that of the previous year shows an increase of Rs. 58,043 as shown in the margin, and it is chiefly spread in the items shown below:—

	Rs.
Revenue for 1880-81	2,32,068
Do. for 1879-80	1,74,025
Difference ...	58,043

	Rs.
Jungle wood	+ 32,086
Firewood	+ 9,121
Bamboos	+ 9,155
Forest produce	+ 8,404

111. Under Jungle wood the largest increase is in Goomsur and Suradá Forests, where, owing to the unusually large demand for Sâl sleepers for Railway works at

Calcutta, a very large quantity of wood has been removed during the year on payment of seigniorage. The increase in Godávari, Cuddapah, and Kurnool Divisions is generally owing to better check and supervision in working the forests under the license system.

112. The increase under Firewood is chiefly in Cuddapah, where the removal of wood by fuel contractors for the Locomotive Department was greater.

113. The increased revenue from bamboos appears in North Arcot and Salem. In the former certain forest tannahs were rented out to contractors on payment of fixed sums per month for removal of bamboos to the extent of specified amounts, the demand in Madras being very great; for the increase in Salem no explanation is given by Mr. Stanbrough, the Deputy Conservator of the Division.

114. The largest increase under "Minor Forest Produce" is in the Anaimalai Range, where hill produce is now collected by the hill tribes.

115. The increase in Cuddapah, Madura, and Tinnevelly being small, does not call for remark.

116. *Cuddapah.*—The payment of a percentage of one anna in the rupee to Reddies for checking licenses was introduced during the year, and the results are reported by the Deputy Conservator to be very favorable, as tending to prevent illicit removal of Government wood.

117. *Kurnool.*—The evils complained of in paragraph 137 of the Conservator's last report have at last been remedied with the sanction of the Collector, and the lower-paid subordinate Revenue Officers no longer issue licenses; the two systems have been fully explained in the Conservator's Inspection Report on this division, published in the Proceedings of the Board of Revenue, No. 826, of 11th May 1881; the result of the change has been very favorable to the revenue.

118. SECTION IV—"*Yield of Forests.*"—The subjoined statement shows the quantity of timber, &c., felled or removed during the year under departmental agency, license and voucher system, and on free pass:—

Description of Timber and other Produce.	Measurement or Quantity.	Quantity removed.					
		By Departmental Agency.		On License.		On Free Pass.	
		1879-80.	1880-81.	1879-80.	1880-81.	1879-80.	1880-81.
Timber	Cubic feet	104,645	102,316¼	314,535	677,493¾	38,870¼	42,989$\frac{7}{16}$
	Posts, Number ...	417	..	...	139	...	...
	Logs or Trees	...	...	...	50	...	...
	Sleepers	...	...	No. 1,191	...	...	...
	Tons	2,859	2,400	2	6	73	151
	Maunds	9,552	11,866¾	H.l. 187	...	...	...
	Cart-loads	...	...	1,399	1,281	2,235	750
	Head-loads	...	...	...	75	882	339
Firewood and Railway fuel...	Cart-loads	.	5,398	...	5,065	6,954	2,570
	Tons	1,234	1,532¼	33,609½	49,484$\frac{10}{11}$	5,062$\frac{1}{16}$	4,658¼
	Pieces	...	52	..	...	...	...
	Head-loads	.		...	...	319	167
Teak Saplings ...	Number	17,452	21,986	...	...	.	.
Bamboos ...	Cart-loads	16	196⅛	46,838	55,565$\frac{2}{16}$	2,834	1,385
	Head-loads	...	...	199	2,974	...	...
	Number	35,389	51,753	3,036	14,261	...	...
Charcoal ...	Tons	...	...	...	2,179	...	...
	Cart-loads	...	...	3,329½	1,024	...	...
	Head-loads	...	...	610	95	...	...
Forest produce...	Maunds	2,311	6,633$\frac{1}{16}$	148,846	132,826	...	...
	Thol	237	801	...	...	...	...
	Kottys	46	62	...	...	...	...
	Lb.	124	2	...	...	...	...
	Bots	113		...	...	...	...
	Cottahs	...	195	...	...	...	...
	Cart-loads	Seers 1,916	15	228	2,314	...	...
	Head-loads	...	...	401	330	...	...
	Number	...	3,800	...	...	...	...

119. The variations of removals of timber under departmental and license systems have been already explained. The quantities removed on free pass are

nearly the same as those removed in the previous year, and no remark is therefore called for.

120. SECTION V—*Financial Results.*—The total revenue realized under all heads during the year amounts to Rupees 4,86,715, and the total charges under "A. Conservancy and Works," "B. Establishments and Contingencies" amount to Rupees 3,51,999, and if the latter be deducted from the total revenue a very large balance of Rupees 1,34,716 remains in favor of the department. This surplus is highly satisfactory compared with the results of the previous year as shown in the margin.

1880-81.	Rs.	Rs.
Revenue		4,86,715
A. Conservancy and Works	1,32,206	
B. Establishments and Contingencies	2,19,793	3,51,999
Surplus		1,34,716
1879-80.		
Revenue	3,83,224	
Expenditure under both main heads	3,81,228	
Surplus		1,996
1878-79.		
Revenue	3,83,878	
Expenditure	3,43,749	
Surplus		40,089
1877-78.		
Revenue	4,04,164	
Expenditure	3,82,493	
Surplus		21,671

"*A. Conservancy and Works.*"	
* 1880-81	1,32,206
1879-80	1,63,367
	31,161
† I (*a*). Timber	24,462
VII (*a*). Buildings	8,444

121. But the total expenditure incurred during the year under "A. Conservancy and Works" compared with that of 1879-80 shows a decrease of Rs. 31,161,* which is chiefly spread† under "I (*a*). Timber" and "VII (*b*). Buildings." The decrease under the former subhead is on account of felling operations having been suspended or restricted in certain divisions, large quantities of timber being available for sale in them, while the decrease under the latter head is nominal, as a sum of Rs. 7,000, which had been drawn and paid to the Department of Public Works for the construction of Forest Officers' building at Manantoddy, has not been accounted for by them by submission of bills within the close of the year.

"*B. Establishments and Contingencies.*"	Rs.
1879-80	2,17,861
1880-81	2,19,793
	1,932

122. The variations under "B. Establishments and Contingencies" being small, no explanation seems called for.

123. The subjoined abstract shows the receipts and charges of the department during the year under report:—

Head.	Receipts.	Amount.	Head.	Expenditure.	Amount.
		Rs.		*"A. Conservancy and Works."*	Rs.
I	Timber and other produce removed from the Forests by Government Agency—		I	Timber and other produce removed from the Forests by Government Agency—	
	(a) Timber	1,83,577		(a) Timber	43,100
	(b) Firewood and Charcoal ...	11,356		(b) Firewood and Charcoal ...	3,252
	(c) Bamboos	2,056		(c) Bamboos	998
	(d) Sandalwood	38,265		(d) Sandalwood	8,689
	(e) Grass and other minor produce	10,880		(e) Grass and other minor produce	5,391
II	Timber and other produce removed from the Forests by consumers or purchasers—		II	Timber and other produce removed from the Forests by consumers, &c.	9,586
	(a) Timber	83,921	III	Confiscated Drift and Waifwood ..	1,083
	(b) Firewood and Charcoal ...	72,911	IV	Revenue from Forests not managed by Government—	
	(c) Bamboos	43,308	V	Rent of leased Forests and payments to shareholders in Forests managed by Government	3,849
	(d) Grazing and fodder grass ...	3,260	VI	Live and Dead Stock—	
	(e) Other minor produce	28,668		(a) Purchase of cattle	...
III	Confiscated Drift and Waifwood ...	3,527		(b) Feed and keep of cattle ...	6,393
IV	Revenue from Forests not managed by Government—			(c) Plants, Tools and Instruments	708
V	Miscellaneous—		VII	Communications and Buildings—	
	(a) Fines and Forfeitures	168		(a) Roads and Bridges	1,566
	(b) Refunds	3,379		(b) Buildings	2,360
	(c) Other sources	1,439		(c) Other Works	674
			VIII	Demarcation, Improvement and Extension of Forests—	
				(a) Demarcation	5,941
				(b) Compensation for lands and rights	50
				(c) Surveys and Working Plants...	880
				(d) Plantation	21,214
				(e) Protection from Fire	5,610
				(f) Other works	7,519
			IX	Miscellaneous—	
				(a) Refunds	2,301
				(b) Law charges	286
				(c) Other charges	756
				Total of A. Conservancy and Works ...	1,32,206
				Total of B. Establishments ...	2,19,793
				Grand Total of all Expenditure ...	3,51,999
				Add Surplus Revenue of the Department	1,34,716
	Total ...	4,86,715		Total ...	4,86,715

124. From the above it will be observed that the net surplus arrived at does not represent the true results of the department unless the increase or decrease in the stock valuation of timber, &c., appertaining to each division be taken into account, and the subjoined abstract will show the particulars thereof :—

Divisions.	Working Charges.	Establishment and Contingencies.	Total Cost.	Receipts.	Difference.	Add Increase or Decrease of Stock.	Net Results.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central Office	...	43,574	43,574	...	— 43,574	...	— 43,574
Goomsur and Surada ...	5,094	2,933	8,027	28,013	+ 19,986	+ 5,427	+ 25,413
Bhadráchalam	412	6,456	6,868	21,471	+ 14,603	...	+ 14,603
Cuddapah	17,354	14,617	31,971	70,328	+ 37,357	+ 18	+ 38,375
Kurnool	1,449	12,031	13,480	20,534	+ 7,054	+ 434	+ 7,488
North Arcot	11,726	11,836	23,562	34,888	+ 11,326	+ 1,014	+ 12,340
South Arcot	8,069	9,826	17,895	12,182	— 5,713	+ 238	— 5,475
Trichinopoly	2,927	5,231	8,158	3,625	— 4,533	...	— 4,533
Madura	5,499	12,722	18,221	22,669	+ 4,448	+ 3	+ 4,451
Tinnevelly	10,924	13,236	24,160	27,115	+ 2,955	— 84	+ 2,871
Coimbatore	22,968	27,678	50,646	79,897	+ 29,251	— 27,427	+ 1,824
Nilgiris	15,472	15,298	30,770	19,001	— 11,769	— 7,058	— 18,827
Salem	3,331	15,763	19,094	55,171	+ 36,077	+ 970	+ 37,047
South Canara	2,816	5,234	8,050	889	— 7,161	— 9,723	— 16,884
Wynaad	5,267	10,829	16,096	18,093	+ 1,997	— 11,538	— 9,541
Nilambúr	15,816	10,945	26,761	64,893	+ 38,132	+ 14,421	+ 52,553
Pálghat	3,082	1,584	4,666	7,946	+ 3,280	— 347	+ 2,933
Total ...	1,32,206	2,19,793	3,51,999	4,86,715	+ 1,34,716	— 33,652	+ 1,01,064

125. From the above it will be observed that the net financial results have ended in a net surplus of Rs. 1,01,064 in favor of the department. But it must be remarked that the decrease in the valuation of timber stock in the Coimbatore Division is likely to be altered pending certain references made to the officer concerned on the subject.

126. The results of almost all the divisions are favorable with the exception of those noted in the margin. The decrease in Nílgiris and Wynaad is chiefly owing to large quantities of timber having been disposed of out of old stock without a corresponding collection thereof during the year. The decrease in South Canara is attributable to the large expenditure incurred in connection with the long-talked-of forest settlement when the division has no means of paying its ordinary establishment charges and to a large quantity of timber having been sold out for a small price on account of complete deterioration.

South Arcot	5,475
Trichinopoly	4,533
Nílgiris	18,827
South Canara	16,884
Wynaad	9,541

127. SECTION VI—GENERAL REMARKS—*Ganjam.*—The Collector remarks on indiscriminate felling as injurious to the forest; the Conservator addressed Government specially on the subject (*vide* No. 1,124, dated 28th January 1881,) with a view to getting the present license and voucher system altered in favor of departmental working, but no orders have been passed.

128. *Godávari.*—Mr. Boileau has charge of the Upper Godávari Forests as well as those of Golgonda in the Vizagapatam District, but as yet he has no proper establishment; it is now feared that the attempt to introduce conservancy into the Vizagapatam Hill Tracts may be premature, and that nothing can be done at present.

129. *Kurnool.*—The Conservator was on tour in this division during the year, and he indicated generally in his Inspection Report, published after the close of the year in the Proceedings of the Board of Revenue, No. 826, of the 11th May 1881, the tracts which he considered should be reserved, but this has not yet been reviewed by Government.

130. The Collector states that, at the suggestion of Mr. Brougham, he reverted to the system of conferring the power of granting licenses only to Forest Officers, Tahsildars, Deputy Tahsildars, and Taluk Sheristadars. The immediate result financially has been very satisfactory. He is of opinion that traders in forest produce are not inconvenienced, and that the village headmen are relieved of a duty of great temptation.

131. The Collector recommends the formation of reserves in the division, as he is quite confident that no well-grounded complaint will be made against the reservation of certain areas.

132. *Cuddapah.*—During the year the rainfall having been copious, the general condition of reserves and plantations has greatly improved.

133. The Deputy Conservator reports that the Revenue Department in his district have always given their cordial help and co-operation in all forest matters.

134. The total revenue of the division under all heads for the year under review has been Rs. 70,328, which is greater than the budget estimate. The increase is due partly to the steady demand for Red wood.

135. Mr. Yarde's remarks on the condition of his reserves and the nuisance of cattle trespass clearly show how necessary a Forest Act is; a maximum of results from forest reservation cannot be looked for until there is an Act to support Forest Officers, and it is almost a waste of money attempting reserves and demarcation with the present state of Forest Law.

136. *North Arcot.*—The demand for bamboos for local consumption and export to Madras and Bangalore is reported to continue steady, and the forest tracts guarded by the five tannahs of Ambúr, Gururaju Polliem and Thellay in the Vellore Taluk, and Ammerdy and Santavassal in Pólúr Taluk have been rented

out on contract for Rs. 664 per month. The contractors are bound to take bamboos to this value, and no remissions are allowed to them if the quantity removed by them falls short in value of the monthly rental, although the seigniorage on excess removals is collected.

137. The total revenue of the division, which amounted to Rs. 35,776, is, like Cuddapah, greater than what was estimated for the year. During the year about 1,668 maunds of sandalwood were collected, of which 1,042 were sold for Rs. 4,195; felling of sandalwood should be discontinued for two or three years, as ripe wood is exhausted.

138. *South Arcot.*—The Deputy Conservator states that the decision on the claim of the trustees of the pagoda to the Tiruvannámalai Hill has not yet been communicated to him, though the Collector promises to dispose of the case soon. The Kulroyen Forest boundary dispute is still unsettled; the boundary of the Chekkadi Forests has been partly settled.

139. During the year 956 head of cattle found trespassing in reserves and plantations were impounded.

140. Two cases of fires are reported to have occurred, one on the eastern slope of the Javady Hills and the other on the southern slope of the Thenmallai Hills. The burning, which lasted a few hours, was confined to 5 and 22 acres, respectively, and the damage done to trees was not great.

141. *Trichinopoly.*—The Deputy Conservator reports that the Railway Company get their supply from private contractors, and that they offer the very low rate of Rs. 4-8-0 per ton for Government wood. Hence the revenue from the plantations is not as satisfactory as might be expected.

142. *Madura.*—In this division there was no departmental felling of timber during the year. But under license removals there has been an increase as compared with those of the previous year, and it is due to greater check having been exercised over clandestine removal. Owing to departmental collection of minor products a large revenue was realized during the year from gallnuts.

143. The Collector of the district reports that complaints are being received that the collection of minor products is interfering unduly with the ryots, preventing them from cutting grass and grazing, &c., and that the Deputy Conservator has been called upon to inquire into the matter. The Conservator believes it is more than probable that the origin of these complaints is only the fact that the ryots are now debarred from collecting the "hill produce" themselves in the Government jungles—a right they, of course, never had any valid claim to.

144. *Tinnevelly.*—The Deputy Conservator reports that the orders of Government issued with regard to the water-shed being strictly considered, the boundary between Tinnevelly and Travancore will seriously affect the revenue of the division, in which view the Collector strongly coincides; a very valuable, if not the most valuable, tract in the district has been lost to this Government by their giving up the Alvarkurchi forests, which have been always considered British territory, and the Collector and Deputy Conservator both think that, if this tract be cleared for coffee-planting, the water-supply on the eastern side will be diminished. The Collector states that many years ago there was a great demand for land in this valley, but it was steadily resisted in the belief that extensive clearing in that quarter would seriously affect the water-supply in Tinnevelly, but the transfer has put the Government beyond any such control. The water-shed line has not been a give-and-take arrangement as originally proposed; but a dead loss to this Government, as they give up all they formerly had on the western water-shed, whilst the Travancore Government retain any acre they ever possessed on the eastern side.

145. The Deputy Conservator further proposes certain rectifications in the boundary line, which will form a subject for separate communication to Government.

146. The demarcation of the two disputed boundaries remaining undisposed of by Mr. Baber in 1879-80 was completed during the year.

Chockumpatty—Tirumalnaiken Pudukudi.
Sivagiri—Vasudavanullur.

147. During the year the demarcation and survey of the cultivated portions of 53 coffee estates and putta lands in the reserved forests were completed, except one regarding which there was some dispute.

Males	259
Females	234
Total ..	493

148. A census of the hill men and women was taken on the prescribed dates, and their total strength was ascertained to be 493.

149. The Singampatti Zemindar having attained his majority on the 31st January 1881, the forest portion of his estate, as decided by Mr. Baber, was delivered over to him in February last together with all timber stock, &c.

150. The health of the establishments is reported to have suffered much; there were three casualties, *i.e.*, two Rangers and one Forester.

151. *Coimbatore.*—The Numbudy of Collungode leased to Government in 1867 a portion of his forests, about 26 square miles, and received in advance a sum of Rs. 30,000 on account of stump fees thereafter becoming payable to him. Since that time authenticated statements showing the number of trees felled every year with their stump fee value used to be submitted, and they were acknowledged by the Numbudy and the amount of each year deducted from the above advance.

152. A similar statement was submitted for timber felled in 1878-79, through the Head Assistant Collector, Pálghat, which was returned, as the head of the Numbudy family (Dhatrivaha Ummal) refused to accept it, as she thought it prejudicial to the interests of the family. There was much correspondence between this department, herself, and the Collector, and the latter official finally settled that all that the Forest Department need do was to furnish yearly the usual statement, and, if this was not acknowledged, an endorsement to that effect should be made on it. The cause for dissatisfaction is, it is presumed, the fact that the Forest Department are at present felling little or no timber, the forests not being worked. The balance still remaining unliquidated in the above advance is Rs. 18,604.

153. *Nilgiris.*—The collection of minor forest produce departmentally was undertaken during the year. The quantity estimated was not collected as the hill-men, who were engaged for the purpose, were induced by the villagers who had been long monopolizing the collection not to work for the department. Perseverance will, it is hoped, overcome the difficulty.

154. The Deputy Conservator reports on experiments made by certain persons on consignments of wattle bark sent for testing its tanning properties. Syed Mahomed Marical and Company report that they tried the bark in various methods, but did not succeed in utilizing it as a tanning material; the Executive Commissariat Officer at Bangalore reports rather favorably on his experiment, the leather was found to be well tanned, though its color was redder than when the ordinary tanning materials were used; he adds that the tanners found a great difficulty in breaking the bark.

155. *Salem.*—The Deputy Conservator states that the revenue of the division under minor forest produce is likely to be much improved; the revenue from railway fuel has fallen compared with that of the previous year owing to contractors having indented largely from private forests.

156. *Wynaad.*—The Deputy Conservator reports that the closing of the Goondry Depôt has caused much inconvenience and loss to the department; the Conservator has twice addressed the Mysore authorities on the subject of being allowed to reopen the depôt, but no answer has been received.

157. The health of the establishments has suffered much during the year, and there have been three deaths from fever and dysentery. One clerk died of fever and the Head Clerk of the Deputy Conservator's Office from fever and dropsy, and the Baigur Forester from fever and dysentery.

158. *South Canara.*—The Collector of the district reports that the clandestine felling of fuel for sandalwood oil stills is due in great part to no facilities having been afforded for a legitimate supply of firewood for such stills which are worked

on Wurg and Kumiki lands. He, therefore, suggests that the old plan of leasing out blocks of jungles be reverted to with advantage; the subject is receiving attention.

159. *Bamboos.*—The two or three clumps of the giant bamboo from Birma planted at Parapa during the last monsoon are reported by the Forest Ranger to be thriving well, but those put down at Uppanangady are not in good condition.

160. The Collector records that he has heard of no abuse of power on the part of any forest official.

161. *Nilambúr.*—Mr. Ferguson gives the following particulars regarding some experiments carried out at the Gun Carriage Factory to test the quality, &c., of the plantation-grown teak at Nilambúr; they are of much interest, but it must be borne in mind that the teak is still young.

"I. Regarding the quality of planted compared with natural-grown teak this season, I again forwarded to the Gun Carriage Factory, Madras, a 14-foot-long cut of a sapling 32 years old; the subjoined tabular statements in detail and abstract give the results compared with those obtained from the experiment made (*vide* Administration Report for 1878-79).

"II. *Explanation of Statement No. I.*—During 1878-79 two teak logs and one in 1880-81 were forwarded to the Superintendent, Gun Carriage Factory, Madras, and subjected to the usual tests with the following results:—No. 1 natural-grown about 60 years old, while Nos. 2 and 3 were planted teak 30 and 32 years of age respectively, showing specific gravity per cubic foot No. 1, $38\frac{1}{8}$ lb.; Nos. 2 and 3 were $37\frac{1}{16}$ and $41\frac{1}{8}$ lb.—difference in favor of No. 3 over Nos. 1 and 2 is 3 lb. and $3\frac{5}{8}$ lb. respectively in favor of planted over natural growth in this division. Nevertheless surpassed in the Pegu and Anaimalai specimens by $1\frac{7}{8}$ lb. and $4\frac{1}{2}$ lb. respectively, which may fairly be accounted for from greater age and maturity of growth: therefore it may be assumed that with age and maturity the planted will at least equal the natural-grown teak."

No. I.—*Statement of Experiments by the Superintendent, Gun Carriage Factory, Madras, testing Weight, &c., of Nilambúr Planted Teak compared with Results of* 1878-79.

Name of District.	Number on Logs.	Date of Experiment.	Age of Logs.	Specific Gravity per Cubic Foot.	Number of Experiments.	Length.	Dimensions Square.	Specimens. Weight when dressed.			Specimens. Weight when ready for breaking.			Distance of Specimen from Centre of Log	Average Weight broke with.	Broke with Weight including Scale 30 lb.	Remarks
			YEARS.	LB.		FEET	INCHES.	LB.	OZ.	DRS	LB.	OZ.	DRS.	INCHES.	LB.	LB.	
Nilambúr.	1	24th February 1879.	60	38 1/8	1	3	1 1/2	3	..	12	1	14	..	1/2	879 1/2	814	
					2	3	1 1/2	2	14	12	1	14	...	3 1/2		912	Bottom.
					3	3	1 1/2	3	...	8	1	14	..	2 1/2		912	
					4	3	1 1/2	2	12	8	1	11	...	2 1/2		590	
					5	3	1 1/2	2	10		1	9		1/2	627 1/2	590	Top of log.
					6	3	1 1/2	2	12	8	1	13	8	4 1/2		702	
	2	24th February 1879.	30	37 1/16	1	3	1 1/2	2	14	12	1	12		1 1/2		590	
					2	3	1 1/2	3	...	...	1	12	...	3 1/2	590	590	Bottom.
					3	3	1 1/2	2	15	...	1	9	...	3 1/2		590	
					4	3	1 1/2	2	14	..	1	13	...	2 1/2		590	
					5	3	1 1/2	2	14	..	1	13	...	3	664 1/2	702	Top of log
					6	3	1 1/2	2	15	8	1	13	...	3		702	
		28th February 1879.	32	41 1/2	1	3	1 1/2	2	4	8	1	15	...	2 1/2		814	
					2	3	1 1/2	2	1	8	1	13	..	1/2	814	814	Top of log
					3	3	1 1/2	2	2	8	1	14	...	3/4		814	
					4	3	1 1/2	2	6	8	2	2	..	1 1/2		926	
					5	3	1 1/2	2	2	8	1	10	8	1	926	926	Bottom of log.
					6	3	1 1/2	2	7	4	1	15	...	3 1/2		926	

Natural-grown Teak.

No. II.—*Abstract showing Average Difference of Weight and Specific Gravity of Present compared with Experiments of* 1878-79.

Name of Division.	Specific Gravity per Cubic Foot.	Age of Logs.	Mean of 3 Specimens.	Length.	Dimensions Square.	Specimens. Weight when dressed.			Specimens. Weight when ready for breaking.			Weight lost in Seasoning.			Average Weight broke with including Scale 30 lb.	Mean Breaking Weight of each Log.	Remarks.
	LB.	YEARS.		FEET.	INCHES.	LB.	OZ.	DRS.	LB.	OZ.	DRS.	LB.	OZ.	DRS.	LB.	LB.	
Nilambúr..	38½	60	1	3	1½	3	...	...	1	13	5	1	2	...	879½	753½	Bottom. Top of log. Natural grown.
			1	3	1½	2	11	10	1	11	2	1	...	8	627½		
Do. ...	37 7/16	30	1	3	1½	2	15	4	1	11	...	1	2	4	590	622	Top of log.
			1	3	1½	2	15	13	1	13	...	1	2	13	664½		
Do. ...	41½	32	1	3	1½	2	2	13	1	14	...	...	6	13	814	870	Top of log.
			1	3	1½	2	5	6	1	15	13	..	5	9	926		Bottom.
Pegu ...	·43	Not given.	1	3	1½	2	5	14	1	1	6	1	4	8	739½	810	Not stated whether top or bottom of log.
			1	3	1½	2	8	13	2	1	5	...	7	8	880½		
Anaimalai...	45½	Do.	1	3	1½	2	8	6	1	15	8	...	8	14	664½	832½	
			1	3	1½	2	8	6	2	5	9	...	2	13	1,000½		

"III. Explanation of Statement No. 2 gives the mean weight when dressed and ready for breaking, also mean breaking weight of each of the three specimens No. I Statement, also the mean of the Pegu and Anamalai specimens showing mean weight when ready for breaking, viz., Nílambur No. III to be 3 lb. 13 oz. 13 dr. and Pegu 3 lb. 2 oz. 11 dr., and Anamalai 4 lb. 5 oz. 1 dr. showing No. III to exceed Pegu by 0-11-2 and exceeded by Anamalai by 0-7-4 and mean breaking weight Nílambur No. III gives 870 lb., Pegu 810 lb., and Anamalai 832½ lb. per cubic foot respectively, showing Nílambur No. III exceeds the Pegu and Anamalai specimen by 60 lb. and 37½ lb. per cubic foot respectively, while the highest breaking weight of the best specimens are Nílambur 926 lb., Pegu 926 lb., and Anamalai 1,038 lb. respectively, the latter exceeding both the former by 112 lb. respectively but considering age I think these tests have been highly satisfactory throughout.

"IV. Colonel Chamier, Superintendent, Gun Carriage Factory, Madras, kindly favored me with the result of the last experiment, and in a foot-note states as follows:—

"'The specimens have the same appearance as the Malabar teak, but of less specific gravity, the fractures with one exception exhibiting a good fibrous splinter. The breakage is very good and is superior to the two logs last tested.'"

The original report herewith enclosed.

Report on the Strength of one Log of Timber Teak, Malabar, received from the Deputy Conservator of Forests, Nilambúr Division, on the 14th December 1880.

Date of Experiment.	Number of Log.	Number of Experiment.	Specific Gravity.	Deflections with 8 half cwts. including Scale 30 lb.	Deflections with 10 half cwts. including Scale 30 lb.	Deflections with 12 half cwts. including Scale 30 lb.	Deflections with 14 half cwts. including Scale 30 lb.	Deflections with 16 half cwts. including Scale 30 lb.	Deflections with 18 half cwts. including Scale 30 lb.	$E = \frac{L^3w}{32bd^3D}$.	$S = \frac{LW}{4bd^2}$.	Distance of Specimen from centre of Log.	*Vide* Register of Timber Page.	Remarks. E = Elasticity. S = Strength. L = Length. W = Weight. w = Average weight. b = Breadth. d = Depth. D = Average deflection.
				INCH.	INCH.	INCH.	INCH.	INCH.	INCH.			INCHES.		
28th February 1881.	3	1	41·2 lb. per cubic foot.	·6	·7	·9	1·2	...	...	126·6	180·8	$2\frac{1}{2}$	105	Broke 1 minute after 14th weight.
		2		·6	·75	·9	1·2	...	...	124·8	180·8	$\frac{1}{2}$		Do. $2\frac{1}{2}$ do. 14th do.
		3		·7	·8	1·0	1·3	...	...	113·3	180·8	$\frac{3}{4}$		Do. $\frac{1}{4}$ do. 14th do.
		4		·65	·8	1·0	1·3	1·7	...	107·3	205·7	$1\frac{1}{2}$		Do. $\frac{1}{4}$ do. 16th do.
		5		·6	·7	·9	1·1	1·4	...	124·4	205·7	1		Do. $1\frac{1}{4}$ do. 16th do.
		6		·55	·65	·8	·9	1·3	...	139·2	205·7	$3\frac{1}{2}$		Do. $\frac{3}{4}$ do. 16th do.

GUN CARRIAGE MANUFACTORY, MADRAS,
4th March 1881.

(Signed) L. CHAMIER, Colonel,
Superintendent, Gun Carriage Factory.

N.B.—The specimens have the same appearance as the Malabar teak, but of less specific gravity, the fractures with one exception exhibiting a good fibrous splinter. The breakage is very good and is superior to the two logs last tested.

Report on the Strength of the undermentioned Timber.

Date.	No. of Specimen.	Nature of Wood.	Length.		Dimensions, Square.	Specimen. Weight when dressed, 26th January 1881.			Specimen. Weight when ready for breaking, 28th February 1881.			Bent with Half Cwt.			Average Weight broke with.	Broke with Pounds including Scale 30 lb.	Remarks.
			FEET.	INCH.	INCHES.	LB.	OZ.	DR.	LB.	OZ.	DR.						
28th February 1881.	1	Timber Teak, Malabar, received from the Deputy Conservator of Forests, Nilambur Division, on the 14th December 1880, and cut on 15th December 1880—Register No. 3.	3	...	$1\frac{1}{2}$	2	4	8	1	15	...	$\frac{8}{\cdot 6}$	$\frac{10}{\cdot 7}$	$\frac{12}{\cdot 9}$	870	814	Top of log.
	2		3	...	$1\frac{1}{2}$	2	1	8	1	13	...	$\frac{8}{6}$	$\frac{10}{\cdot 75}$	$\frac{12}{\cdot 9}$		814	
	3		3	...	$1\frac{1}{2}$	2	2	8	1	14	...	$\frac{8}{\cdot 7}$	$\frac{10}{\cdot 8}$	$\frac{12}{1 \cdot 0}$		814	
	4		3	...	$1\frac{1}{2}$	2	6	8	2	2	..	$\frac{8}{\cdot 65}$	$\frac{10}{\cdot 8}$	$\frac{12}{1 \cdot 0}$		926	Bottom of log.
	5		3	... ..	$1\frac{1}{2}$	2	2	8	1	14	8	$\frac{8}{\cdot 6}$	$\frac{10}{\cdot 7}$	$\frac{12}{\cdot 9}$		926	
	6		3	..	$1\frac{1}{2}$	2	7	4	1	15	...	$\frac{8}{\cdot 55}$	$\frac{10}{\cdot 65}$	$\frac{12}{\cdot 8}$		926	

GUN CARRIAGE MANUFACTORY, MADRAS,
4th March 1881.

(Signed) L. CHAMIER, Colonel,
Superintendent, Gun Carriage Factory.

∞ *N.B.*—The specimens have the same appearance as the Malabar teak, but of less specific gravity, the fractures with one exception exhibiting a good fibrous splinter. The breakage is very good and is superior to the two logs last tested.

162. *Forest Act.*—A steady annual improvement in our reserves and forests cannot be expected until a Forest Act gives definition to our forest laws and regulations throughout the Presidency and strengthens systematic conservancy. At present we almost entirely depend in each district upon the support a Collector, for the time being, chooses to give; tracts treated as reserves one year are perhaps thrown open the next, and our officers are quite at sea with reference to any definite system for checking smuggling, forest offences, &c., because we have no proper code of rules, and what we have differ in different districts, and are often not upheld or constantly being altered, and punishments when obtained are often so lenient as to be a premium on the breach of Forest Rules.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) R. H. BEDDOME, Colonel,
Conservator of Forests.

MADRAS,
11*th July* 1881.

FORWARDED to Government through the Secretary to the Board of Revenue.

(Signed) R. H. BEDDOME, Colonel,
Conservator of Forests.

APPENDICES.

No. 1.—*Statement showing the Quantity and Valuation of Timber, &c., felled and removed by Departmental Agency during the Year* 1880-81.

Divisions.	Teakwood and Saplings.											Rosewood and Blackwood.				
	Outlying in the Forest.					At the Forest Depôt.			At the Sale Depôt.			Outlying in the Forest.				
	Quantity.		Valuation.			Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.		
	Logs or Pieces.	Cubic Feet.	Seigniorage Value.	Cost of Felling and Supervision.	Total.	Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet		Logs or Pieces.	Cubic Feet.	Seigniorage Value.	Cost of Felling and Supervision.	Total.
			Rs.	Rs.	Rs.			Rs.			Rs.			Rs.	Rs.	Rs.
Goomsur and Suradá...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	.
Godávari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	1,584	...	343	...	...	...	...	...
North Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Arcot ...	...	...	...	...	...	...	...	...	1,440	360	306	...	...	...	...	...
Trichinopoly ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	69	10,404	1,152	...	...	...	...	...
Coimbatore	...	...	...	...	...	...	...	...	54	354½	264	...	...	...	...	...
Nilgiri	...	...	...	...	...	...	...	...	...	579¾	435	...	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	69	86	...	...	...	...	...
South Canara ...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wynaad	...	18,513¾ *1,772	...	868	868	...	...	...	...	...	...	...	†47	...	...	...
Nilambúr	...	...	...	...	...	...	...	Saplings No. 21,986	486	10.747	10,747 20,000	...	...	...	...	...
Pálghat	...	...	..	...	...	...	...	Saplings No. 30	...	173	173 20	...	...	...	...	...
Total ...	...	20,285¾	...	868	868	...	...	3,633 and Saplngs 22,016		22,687½	33,526	...	47	...	...	...

* Prepared and bought by one contractor who had borne all felling charges.

† A fallen tree and sold in rough state.

No. 1.—*Statement showing the Quantity and Valuation of Timber, &c., felled and removed by Departmental Agency during the Year* 1880-81—(Continued).

Divisions.	Rosewood and Blackwood—(*Continued*).						Redwood.										
	At the Forest Depôt.			At the Sale Depôt.			Outlying in the Forest.					At the Forest Depôt.			At the Sale Depôt.		
	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.			Quantity.		Valuation.	Quantity.		Valuation.
	Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Posts.	Maunds.	Seigniorage Value.	Cost of Felling and supervision	Total.	Posts.	Maunds or Tons.		Posts.	Tons.	
			Rs.			Rs.			Rs.	Rs.	Rs.			Rs.			Rs.
Goomsur and Suradá.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Godávari	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	.	...
Cuddapah	...	...	...	...	...	...	..	...	..	...	...	...	...	...	195	1,950	27,856
Kurnool	...	...	...	...	...	...	...	..	...	..	...	...	...	...	...	...	...
North Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	450	5,400
South Arcot	...	...	...	...	...	...		..	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	..
Tinnevelly	...	...	...	...	...	.	...	...	...	...	...	..	...	...	...	...	...
Coimbatore	...	...	...	6	24½	21	..	...	...	...	...	...	...	...	...	...	...
Nílgiri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Canara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wynaad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Nilambúr	...	...	...	33	1,196	1,196	..	...	...	...	...	...	...	...	...	...	...
Pálghat	...	...	...	...	20	20	...	...	...	...	...	...	..	...	...	...	...
Total ...	...	...	...	39	1,240½	1,237	...	...	...	...	..	...	...	...	195	2,400	33,256

No. 1.—*Statement showing the Quantity and Valuation of Timber, &c., felled and removed by Departmental Agency during the Year* 1880-81—(Continued).

Divisions.	Other Junglewood.										Firewood and Railway Fuel.			
	Outlying in the Forest.					At the Forest Depôt.			At the Sale Depôt.			Outlying in the Forest.		At the Forest Depôt.	
	Quantity.		Valuation.			Quantity.		Valuation.	Quantity.		Valuation.	Quantity.	Valuation.	Quantity.	Valuation.
	Logs or Pieces.	Cubic Feet.	Seigniorage Value.	Cost of Felling and Supervision.	Total.	Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.					
			Rs.	Rs.	Rs.			Rs.			Rs.		Rs.		Rs.
Goomsur and Suradá.	...	...	...	...	...	...	...	...	4,262	17,186	11,142	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	32	560	64	...	...	...	...
North Arcot	...	...	...	...	...	...	...	...	...	621½	621	...	...	...	...
South Arcot	...	...	...	...	...	93	366	117	1,629	3,957	2,039	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	1,321	9,477	4,547	...	...	...	...
Coimbatore	...	...	...	...	...	...	...	...	102	756	575	...	...	...	...
Nílgiri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	1,334	1,369	...	...	...	...
South Canara ...	...	...	...	...	...	57	106½	15	...	...	...	...	...	...	...
Wynaad	...	1,175½	...	55	55	...	...	...	...	...	...	...	...	...	...
Nilambúr	...	...	...	...	...	...	...	...	509	15,318	3,830	...	...	...	...
Pálghat	...	1,555	...	62	62	...	...	...	...	5,645	1,968	...	...	...	...
Total ...	...	2,730½	...	117	117	150	472½	132	7,855	54,854½	26,155	...	...	...	...

No. 2.—*Statement showing the Quantity and Valuation of Timber, &c., felled and removed by Departmental Agency during the Year* 1880-81—(Continued).

Divisions.	Firewood and Railway Fuel—(*Continued*).		Bamboos.						Forest Produce.			
	At the Sale Depôt.		Outlying in the Forest.		At the Forest Depôt.		At the Sale Depôt.		Outlying in the Forest.		At the Forest Depôt.	
	Quantity.	Valuation.	Quantity.	Valuation.	Quantity.	Valuation.	Quantity.	Valuation.	Quantity.	Valuation.	Quantity.	Valuation.
	TONS.	RS.	NO.	RS.	NO.	RS.	NO.	RS.	MAUNDS.	RS.	C. LOADS.	RS.
Goomsur and Surada.	...	...	...	...	...	...	...	...	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	45	25	...	...	...	...	C. loads 180	180	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...
North Arcot	C. loads 4,793	2,306	...	...	...	...	44	44	...	...	...	...
South Arcot	419	1,427	...	...	...	...	31	21	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...
Madura	135¼ Pieces 52	382	...	...	...	...	...	...	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore	93¼	491	...	...	...	...	C. loads 16½	197	...	...	...	...
Nilgiri	C. loads 605	1,739	...	...	...	...	12	2	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	...	15	345
South Canara ...	...	...	...	...	...	...	...	...	...	...	...	...
Wynaad	...	...	...	...	800	8	...	...	...	...	...	...
Nilambúr	...	...	12,600 19,948*	127	...	...	...	...	10½	3	...	...
Pálghat	...	...	...	...	...	...	17,578	816	...	...	...	...
	...	...	...	...	...	...	740	88	...	...	...	...
Total ...	693 C. loads 5,398 Pieces 52	6,370	32,548	127	800	8	18,405 C. loads 196½	1,348	10½	3	15	345

* Felled by ryots who had underwent felling charges.

No. 1.—*Statement showing the Quantity and Valuation of Timber, &c., felled and removed by Departmental Agency during the Year* 1880-81—(Continued).

Divisions.	Forest Produce—(*Continued*).		Sandalwood.						Total Valuation.			
	At the Sale Depôt.		Outlying in the Forest.		At the Forest Depôt.		At the Sale Depôt.					
	Quantity.	Valuation.	Quantity.	Valuation.	Quantity.	Valuation.	Quantity.	Valuation.	Outlying in the Forest.	At the Forest Depôt.	At the Sale Depôt.	Grand Total.
	MAUNDS.	RS.		RS.		RS.	MAUNDS.	RS.	RS.	RS.	RS.	RS.
Goomsur and Suradá ...	...	...	...	...	...	...	...	...	...	...	11,142	11,142
Godávari	...	...	...	...	..	...	...	...	...	...	...	..
Cuddapah	...	...	...	...	...	...	...	...	...	...	28,061	28,061
Kurnool	55	28	...	...	...	...	...	...	...	...	435	435
North Arcot	...	...	...	...	...	...	1,668	1,668	...	...	10,039	10,039
South Arcot ...	137	108	...	...	...	...	513	1,539	...	117	5,440	5,557
Trichinopoly	No. 3,800		...	...	...	...	...	...	...	...	*Nil.*	...
Madura	...	...	...	...	...	...	...	...	...	...	2,892	2,892
Tinnevelly ...	5,380	2,510	...	...	...	...	...	...	...	...	7,668	7,668
Coimbatore	Tolams 801 Maunds 993 11/16 Cotahs 62	1,772	...	...	...	...	6,683½	14,885	...		16,368	16,368
Nílgiri	462	130	...	...	...	...	602¼	3,167	...	345	5,364	5,709
Salem	lb. 2 oz. 1	23	...	...	...	...	2,400	12,003	...	...	13,458	13,458
South Canara	...	...	...	...	...	...	...	...	...	23	...	23
Wynaad	11½	707	...	...	...	...	...	...	1,053	...	707	1,760
Nilambúr	Bottles 195		...	...	...	...	...	..	..	..	36,589	36,589
Pálghat	...	...	...	...	...	...	...	.	62	.	2,269	2,331
Total ...	7,039 5/16 No. 3,800 Tolams 801 Cotahs 62 lb. 2 oz. 1 Bottles 195	5,278	...	...	...	...	11,866¾	33,262	1,115	485	1,40,432	1,42,032

No. 2.—*Statement showing the Quantity and Valuation of Timber, &c., sold and supplied by the Department during the Year* 1880-81.

Divisions.	Teakwood and Saplings.								Ebony or Blackwood.							
	At the Sale Depôt.				Outside the Sale Depôt.				At the Sale Depôt.				Outside the Sale Depôt.			
	Quantity.		Valuation.	Actual Value realized	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.
	Pieces or Logs.	Cubic Feet.			Pieces or Logs.	Cubic Feet.			Pieces or Logs.	Cubic Feet.			Pieces or Logs.	Cubic Feet.		
			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
Goomsur and Suradá ...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...
Godávari	...	...	...	...	.		...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...
North Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Arcot	1,440	360	306	405	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	.	...	...	...	..	..
Madura	...	...	...	...	...	...	...	. .	...	...	...	...	...	...	...	...
Tinnevelly	77	11,238	1,263	2,932	...	.	...	...	...	...	...	...	...	...	...	...
Coimbatore	...	18,785¾	27,115	20,502	. .	...	...	...	...	...	...	...	...	.	...	...
Nilgiri	215	4,066¼	6,099	6,460	192	2,076¼ *84	1,557 37	1,529	...	...	...	...	...	*85	32	...
Salem	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Canara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Wynaad	...	7,070¾	7,592	3,930	...	22,802 1/12	10,686	10,686	...	193¾	288	221		500	188	188
Nilambúr	419	8,619 Saplings 31,963	30,000	8,260 28,173	1,372	21,044	20,000	15,138	153	2,636	...	2,007	1	30	...	26
Pálghat	...	265½	266	276	...	Cart loads. Saplings 561	4,488	4,488	...	61½	61	64	...	...	..	...
Total ...	2,151	50,405¼ No. 31,963	72,641	70,938	1,564	46,006⅝ C. loads 561	36,768	31,811	153	2,891	349	2,292	1	615	220	214

* Wastage by fire and white-ants.

No. 2.—*Statement showing the Quantity and Valuation of Timber, &c., sold and supplied by the Department during the Year* 1880-81—(Continued).

Divisions.	Rosewood.								Sandalwood.			
	At the Sale Depôt.				Outside the Sale Depôt.				At the Sale Depôt.			
	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.
	Pieces or Logs.	Cubic Feet.			Pieces or Logs.	Cubic Feet.			Tons.	Maunds.		
			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
Goomsur and Suradá ...	...	...	...	...	...	...	...	...	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	..
North Arcot	...	...	...	...	...	...	...	...	...	1,042	1,042	4,195
South Arcot	...	...	...	...	...	...	...	...	...	515	1,561	2,449
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore	261	6,315	6,038	5,413	...	...	...	...	...	4,607½	8,882	18,454
Nilgiri	...	...	...	...	...	...	...	...	...	602½	3,167	3,167
Salem	...	...	...	...	...	...	...	...	...	2,167	10,838	10,000
South Canara	...	...	...	...	...	...	...	...	...	...	...	...
Wynaad	...	...	...	...	...	...	...	...	...	...	...	...
Nilambúr	...	...	...	...	...	...	...	...	...	...	...	...
Pálghat	...	...		...	...	...	...	...	...	...	...	...
Total ...	261	6,315	6,038	5,413	...	...	...	...	...	8,933½	25,490	38,265

No. 2.—*Statement showing the Quantity and Valuation of Timber, &c., sold and supplied by the Department during the Year* 1880-81—(Continued).

Divisions.	Red Saunder Roots and Posts.								Other Jungle Wood.							
	At the Sale Depôt.				Outside the Sale Depôt.				At the Sale Depôt.				Outside the Sale Depôt.			
	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.
	Posts.	Tons.			Posts.	Tons.			Pieces or Logs.	Cubic Feet.			Logs or Pieces.	Cubic Feet.		
			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
Goomsur and Suradá ...	...	...	...	...	...	...	...	...	2,185	7,691	5,715	5,618	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	189	1,950	27,838	33,965	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Arcot	...	450	5,400	6,750	...	...	...	...	...	661	661	826	...	...	...	...
South Arcot	...	...	...	...	...	...	...	...	1,611	3,568	1,840	1,982	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	1,342	9.024	4,879	7,291	...	...	...	..
Coimbatore	...	...	...	...	...	...	...	...	191	1,693	1,137	1,581	...	...	..	...
Nílgiri	...	...	...	..	...	...	...	...	...	...	...	..	...	*260	49	...
Salem	...	...	...	...	...	...	...	...	971	2,208	1,700	1,852	...	...	...	...
South Canara	...	...	...	...	...	...	...	...	...	...	...	...	1,882	23,815½	9,746	260
Wynaad	...	...	...	...	...	...	...	...	...	...	...	...	...	1,177	440	440 721
Nilambúr	...	...	...	...	...	...	...	...	183	3.363	...	1,113	1,301	39,896	...	6,825 †1,410
Pálghat	...	...	...	...	...	...	...	...	30	4,170	1,690	1,732	1,056	...	543	543
Total ...	189	2,400	33,238	40,715	...	...	...	...	6,513	32,378	17,622	21,995	4,239	65,148½	10,778	10,199

* Wastage by fire and white-ants.

† Collections from rejected wood.

No. 2.—*Statement showing the Quantity and Valuation of Timber, &c., sold and supplied by the Department during the Year* 1880-81—(Continued).

Divisions.	Firewood and Railway Fuel.								Charcoal.							
	At the Sale Depôt.				Outside the Sale Depôt.				At the Sale Depôt.				Outside the Sale Depôt.			
	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.
	Cart Loads.	Tons.			Cart Loads.	Tons.			Cart Loads.	Tons.			Cart Loads.	Tons.		
			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
Goomsur and Surada ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	44	25	25	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Arcot	...	1,948½	1,878	5,985	...	...	...	...	...	...	...	...	...	...	...	...
South Arcot	...	419	1,427	1,427	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	136	379	546	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore	...	93¾	491	609	...	...	...	...	...	...	...	...	...	...	...	...
Nilgiri	507	...	1,458	1,498	...	...	...	...	...	...	...	...	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Canara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wynaad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nilambúr	102	...	...	204	...	...	...	330	...	...	...	...	...	...	...	...
Pálghat	...	...	...	...	...	156¼ & loppings.	748	732	...	...	...	...	...	...	...	...
Total ..	609	2,641¼	5,658	10,294	...	156¼	748	1,062	...	...	...	...	...	...	...	...

No. 2.—*Statement showing the Quantity and Valuation of Timber, &c., sold and supplied by the Department during the Year* 1880-81—(Continued).

Divisions.	Bamboos.								Junglewood Saplings.							
	At the Sale Depôt.				Outside the Sale Depôt.				At the Sale Depôt.				Outside the Sale Depôt.			
	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.
	Cart Loads.	No.			Cart Loads.	No.			No.	Cart Loads.			No.	Cart Loads.		
			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
Goomsur and Suradá ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	180	...	180	180	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Arcot	...	45	44	191	...	...	...	...	...	...	...	...	...	...	...	...
South Arcot	...	31	21	21	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	$11\frac{7}{24}$	...	130	158	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore	12	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Nílgiri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem	4	...	41	41	...	...	...	...	...	...	...	...	...	...	...	...
South Canara	...	...	...	...	...	800	12	36	...	...	...	...	...	...	...	...
Wynaad	...	...	...	...	...	32,548	524	519	...	...	...	...	...	...	...	...
Nilambúr	...	8,217	...	400	...	9,023	...	416	...	...	...	...	...	...	...	...
Pálghat	...	740	89	88	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	$207\frac{7}{24}$	9,033	507	1,085	...	42,371	536	971	...	...	...	...	...	...	...	...

No. 2.—*Statement showing the Quantity and Valuation of Timber, &c., sold and supplied by the Department during the Year* 1880-81—(Continued).

Divisions.	Minor Forest Produce.								Total.	
	At the Sale Depôt.				Outside the Sale Depôt.					
	Quantity.		Valuation.	Actual Value realized.	Quantity.		Valuation.	Actual Value realized.	Valuation.	Actual Value realized.
	Maunds.	No.			Maunds.	No.				
			Rs.	Rs.			Rs.	Rs.	Rs.	Rs.
Goomsur and Suradá	...	...	...	...	...	...	...	...	5,715	5,618
Godávari	...	...	...	...	...	...	...	...	*Nil.*	*Nil.*
Cuddapah	...	...	...	...	...	...	...	...	28,043	34,170
Kurnool	...	...	...	...	...	...	...	...	*Nil.*	*Nil.*
North Arcot	...	...	...	38	...	...	...	...	9,025	17,985
South Arcot	42¼	3,800	55	76	...	...	...	...	5,210	6,360
Trichinopoly	...	...	...	...	...	...	...	...	...	4
Madura	5,355¼	...	2,510	3,609	...	...	...	...	2,889	4,155
Tinnevelly	Tolams 146¼ Measures 148$\frac{12}{16}$ Cotahs 106	...	1,480	5,094	...	...	...	...	7,752	15,475
Coimbatore	462	...	130	572	...	...	...	...	43,795	47,133
Nilgiri	c.l. 15 lb. 2 oz. 1	...	368	368	...	...	...	...	12,767	13,022
Salem	Particulars not given.			295	...	...	...	...	12,579	12,188
South Canara	...	...	...	152	...	...	...	...	9,758	448
Wynaad	8$\frac{5}{6}$	bottles 189	670	605	10½ Seeds 4,576	...	72	71	20,460	17,381
Nilambúr	...	...	...	...	...	...	...	...	50,000	64,272
Pálghat	...	...	...	...	...	...	...	...	7,885	7,923
Total ...	5,868$\frac{5}{6}$ Tolams 146¼ Measures 148$\frac{12}{16}$ Cotahs 106 C. loads 15 lb. 2 oz. 1	No. 3,800 Bottles 189	5,213	10,809	10½ Seeds 4,576	...	72	71	2,15,878	2,46,134

No. 3.—*Statement showing the Quantity and Value of Timber and other Produce removed under the License System during the Year* 1880-81.

Divisions.	Teakwood.		Ebony or Blackwood.		Other Junglewood.		Firewood.		Engine Fuel.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	TREES.	Rs. A. P.		Rs. A. P.	CUBIC FEET.	Rs. A. P.	TONS.	Rs. A. P.	TONS.	Rs. A. P.
Goomsur and Suradá	...	...	...	...	291,120	21,385 0 0	3,524½	894 0 0	...	...
Golgonda	..	...	...	...	...	...	...	...	...	...
Bhadráchalam	...	...	...	...	..	19,379 0 0	...	95 0 0	...	...
Cuddapah	...	...	...	...	105,837	10,313 0 0	5,073½	4,273 0 0	7,246¼	16,232 0 0
Kurnool	...	...	...	...	137,090	13,703 0 0	458½	344 0 0	...	...
North Arcot	...	...	...	...	C. loads 1,281 H. loads 75	2,780 0 0	C. loads 2,761 H. loads 527	1,044 0 0	158	354 0 0
South Arcot	...	...	...	...	9,436	555 0 0	2,416¾	2,768 0 0	...	...
Trichinopoly	...	...	...	...	Pieces 103 Tons 17	204 0 0	542¼	1,625 0 0	...	...
Madura	...	...	...	...	44,226½	6,588 0 0	8,956$\frac{21}{224}$	6,682 0 0	...	...
Tinnevelly	...	...	...	...	27,427	1,906 0 0	2,584	4,092 0 0	...	...
Coimbatore	...	...	...	155 0 0	23,149½	2,559 0 0	11,876$\frac{13}{56}$	9,824 0 0	...	...
Nilgiri	9	45 0 0	...	...	Trees 59 Poles 36	243 0 0	C. loads 2,304 B. loads 47 H. loads 30,148	5,512 0 0	...	...
Salem	...	...	...	...	39,024	4,009 0 0	3,694	3,104 0 0	2,954$\frac{8}{28}$	6,866 0 0
South Canara	...	...	...	...	184	80 0 0	H. loads 1,218	25 0 0	...	...
Wynaad	...	...	...	...	...	...	...	...	...	...
Nilambúr	...	...	...	...	...	.	...	...	...	...
Pálghat	...	...	...	...	...	17 0 0	...	...	...	...
Total ...	9	45 0 0	...	155 0 0	677,493½ C. loads 1,281 Trees 50 H. loads 75 Pieces 139 Tons 17	83,721 0 0	39,126½ C. loads 5,065 H. loads 31,893 B. loads 47	40,192 0 0	10,358½	23,452 0 0

No. 3.—*Statement showing the Quantity and Value of Timber and other Produce removed under the License System during the Year* 1880-81—(Continued).

Divisions.	Charcoal.		Bamboos.		Forest Produce.		Total.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Value.
	TONS.	RS.	CART LOADS.	RS. A. P.	MDS.	RS. A. P.	RS. A. P.
Goomsur and Suradá	14½	18 0 0	...	...	...	17 0 0	22,314 0 0
Golgonda	...	...	...	...	...	...	...
Bhadráchalam	...	...	...	...	...	1,856 0 0	21,330 0 0
Cuddapah	346½	1,164 0 0	1,602½	1,987 0 0	34,480	1,225 0 0	35,194 0 0
Kurnool	296½	888 0 0	10,561	3,300 0 0	C. loads 331	1,086 0 0	19,271 0 0
North Arcot	C. loads 1,024 H. loads 38	1,538 0 0	H. loads 338 14,175	10,381 0 0	C. loads 382 H. loads 4 Mds. 1,610	785 0 0	16,882 0 0
South Arcot	15¼	48 0 0	1,407 H. loads 2,557	1,236 0 0	C. loads 1,207 Mds. 25,900	1,142 0 0	5,749 0 0
Trichinopoly	...	...	No. 211	51 0 0	...	1,231 0 0	3,111 0 0
Madura	68$\frac{1}{5}$$\frac{1}{8}$	251 0 0	2,034$\frac{5}{16}$	2,172 0 0	C. loads 394	2,027 0 0	17,720 0 0
Tinnevelly	624	2,096 0 0	403	348 0 0	...	2,471 0 0	10,823 0 0
Coimbatore	231$\frac{13}{112}$	691 0 0	10,623$\frac{3}{16}$	12,548 0 0	Mds. 48,276	5,837 0 0	31,614 0 0
Nílgiri	H. loads 57	14 0 0	H. loads 79	4 0 0	H. loads 326	20 0 0	5,838 0 0
Salem	566½	2,529 0 0	14,759¾	11,070 0 0	Mds. 22,560	14,257 0 0	41,835 0 0
South Canara	17	30 0 0	No. 14,050	211 0 0	Tamarind rent.	24 0 0	370 0 0
Wynaad	...	...	...	...	...	...	*Nil.*
Nilambúr	...	...	...	...	...	...	...
Pálghat	...	...	...	...	...	...	17 0 0
Total ..	Tons 2,179$\frac{3}{33}$$\frac{1}{6}$ C. loads 1,024 H. loads 95	9,267 0 0	C. loads 55,565$\frac{3}{16}$ H. loads 2,974 No. 14,261	43,308 0 0	Mds. 132,826 C. loads 2,314 H. loads 330	31,928 0 0	2,32,068 0 0

No. 4.—*Statement of Total Yield of Forests during the Year* 1880-81.

Divisions.	Teakwood.			Sandalwood.			Ebony or Blackwood.			Forest Produce.	
	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.	Departmentally.	On License.
	CUBIC FEET.	TREES.	C. FEET.	MAUNDS.	MAUNDS.	MAUNDS.	CUBIC FEET.	C. FEET.	C. FEET.	MAUNDS.	MAUNDS.
Goomsur	...	...	...	...	...	...	...	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	34,480
Kurnool	Pieces 1,584	...	...	...	...	...	...	...	...	55	C. loads 331 Maunds 1,610
North Arcot	..	...	...	1,668	...	...	...	...	...	...	C. loads 382 H. loads 4
South Arcot	360	...	...	513	...	...	...	...	...	137 No. 3,800	25,900 Cart loads 1,207
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	5,380	C. loads 394
Tinnevelly	10,404	...	...	...	...	...	...	...	...	Tolams 801 Maunds 993 11/16 Cotahs 62	...
Coimbatore	354½	...	...	6,683½	...	...	24¼	...	...	462 C. loads. lb. oz. 15 2 1	48,276 H. loads 326
Nilgiri	579¼	9	...	602¼	...	...	...	...	...		
Salem	69	...	...	2,400	...	...	...	...	...	...	22,560
South Canara	...	...	...	...	...	...	...	...	...	..	Tamarind rent.
Wynaad	20,285⅛	...	...	...	...	...	...	...	...	22 Bottles 195	...
Nilambúr	10,747	...	...	...	...	...	1,196	...	...	...	...
Pálghat	173	...	...	...	...	...	20	...	...	...	...
Total ...	42,972⅛ Pieces 1,584	9	...	11,866¼	...	...	1,240¼	...	...	Maunds 7,049 11/16 C. loads 15 No. 3,800 Tolams 801 Cotahs 62 lb. oz. 2 1 Bottles 195	Mds. 132,826 C. loads 2,314 H. loads 330

No. 4.—*Statement of the Total Yield of Forests during the Year* 1880-81—(Continued).

Divisions.	Red Sanders.			Rosewood.			Junglewood.			Firewood, &c., Railway Fuel.		
	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.
	TONS.	TONS.	TONS.	C. FEET.	C. FEET.	C. FEET.	C. FEET	C. FEET.	C. FEET.	TONS.	TONS.	TONS.
Goomsur	...	...	...	...	...	...	17.186	291,120	..	...	3,524½	...
Godávari	...	...	...	..	...	...	...	...	...	.	...	...
Cuddapah	Posts 195 and 1,950	...	...	...	...	...	...	105,837	16,036	45	12,319¾	933½
Kurnool	...	...	...	...	...	...	560	137,090	4,840	..	458½	1,276
North Arcot	450	...	...	...	...	...	621½	C. loads 1,281 H. loads 75	C. loads 750	C. loads 4,793	158 C. loads 2,761 H. loads 527	C. loads 2,570
South Arcot	...	...	...	...	...	...	4,323	9,436	1,300	419	2,416¾	76
Trichinopoly	...	...	...	...	...	...	.	Pieces 103 Tons 17	...	...	542½	.
Madura	...	...	...	...	...	...	...	44,226½	9,175	135½ Pieces 52	8,956$\frac{81}{224}$	250
Tinnevelly	...	...	...	...	...	...	9,477	27,427	1,000	...	2,584	2½
Coimbatore	...	...	...	...	...	...	756	23,149½	366$\frac{7}{16}$	93¾	11,876$\frac{13}{16}$	2,121¼
Nilgiri	..	...	...	...	...	...	...	Trees 50 Poles 36	Trees 151 H. loads 339	C. loads 605	C. loads 2,304 B. loads 47 H. loads 30,148	H. loads 167
Salem	...	...	...	...	...	...	1,334	39,024	10,272	...	6,648$\frac{8}{16}$	...
South Canara	...	...	...	...	...	...	106¼	184	.	...	H. loads 1,218	...
Wynaad	...	...	...	47	...	...	1,175½	.		...	.	...
Nilambúr	...	...	...	...	...	...	15,318	..	.	...	.	..
Pálghat	...	...	...	..	...	...	7,200	...	..	..	. .	..
Total ...	2,400 Posts 195	...	. .	47	...	...	58,057	677,493¾ C. loads 1,281 H. loads 75 Pieces 139 Trees 50 Tons 17	42,989$\frac{7}{16}$ C. lds. 750 Trees 151 H. l. 339	693 C. loads 5,398 Pieces 52	49,484$\frac{13}{16}$ C. loads 5,065 H. loads 31,893 Bullock loads 47	4,658¾ C. loads 2,570 H. loads 167

No. 4.—*Statement of Total Yield of Forests during the Year* 1880-81—(Continued).

Divisions.	Bamboos.			Saplings.			Charcoal.			Canes or Ratan.		
	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.	Departmentally.	On License.	Free.
	NO.	C. LOADS.	C. LOADS.	NO.	NO.	NO.	TONS.	TONS.	TONS.	NO.	NO.	NO.
Goomsur	...	..	...	...	...	...	...	14½	...	...	...	...
Godávari	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	C. loads 180	1,602½	84	...	...	...	...	346½	...	...	...	...
Kurnool	...	10,561	59	...	...	...	...	296½	...	...	...	...
North Arcot	44	H. lds. 338 14,175	660	...	...	...	...	C. L. 1,024 H. loads 38	...	...	...	...
South Arcot	31	1,407 H. lds. 2,557	33½	...	...	...	...	15¾	...	...	...	...
Trichinopoly	...	No. 211	...	...	...	...	...	...	...	...	...	...
Madura	...	2,034 5/16	11 11/16	...	...	...	...	68 7/16	...	...	...	...
Tinnevelly	C. loads 16½	403	...	...	...	...	...	624	...	...	...	...
Coimbatore	12	10,623 3/16	353½	...	...	...	...	231 13/16	...	...	...	...
Nílgiri	...	H. loads 79	...	...	...	...	...	H. loads 57	...	...	...	...
Salem	...	14,759¼	183	...	...	...	...	566½	...	...	...	...
South Canara	800	No. 14,050	...	...	...	...	...	17	...	...	...	...
Wynaad	32,548	...	...	...	...	...	...	...	...	...	...	...
Nílambúr	17,578	...	...	21,986	...	...	...	...	...	...	...	...
Pálghat	740	...	...	30	...	...	...	...	...	...	...	...
Total ...	51,753 C. loads 196½	55,565 5/16 H. lds. 2,974 No. 14,261	1,385¼	22,016	...	...	...	2,179 811/896 C. lds. 1,024 H. loads 95	...	...	...	...

No. 5.—*Statement of Free Pass issued during the Official Year* 1880-81.

Divisions.	Timber.		Firewood.		Bamboos.	
	Building purposes.	Agricultural purposes.	Agricultural and Domestic use, and for Manufacture of Jaggery.	Burning Corpse and erecting Codu-sheds, &c.	Building purposes.	Agricultural purposes.
	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.	Quantity.
	CUBIC FEET.	CUBIC FEET.	TONS.	TONS.	CART-LOAD.	CART-LOAD.
Goomsur and Suradá.	...	...	*Nil.*	...	...	...
Godáveri*	...	...	...	...	...	...
Cuddapah	15,376	660	375	558½	84	...
Kurnool	4,840	...	1,276	...	59	...
North Arcot	C. loads 320	C. loads 430	C. loads 2,570	...	540	120
South Arcot	...	1,300	76	...	...	33½
Trichinopoly	...	...	*Nil.*	...	...	...
Madura	7,171½	2,003¾	250	...	11½½	...
Tinnevelly	817	183	2½	...	...	...
Coimbatore	51½	314½½	2,055½	66	33¾	320½
Nilgiri	Trees 151 H. loads 339	...	...	H. loads 167	...	...
Salem	3,424	6,848	...	...	36	147
South Canara ...	...	...	*Nil.*	...	...	...
Wynaad	...	...	*Nil.*	...	. .	...
Nilambúr	...	...	*Nil.*	...	...	...
Pálghat	...	...	*Nil.*	...	...	...
Total ...	31,680 C. loads 320 Trees 151 H. loads 339	11,309 ¾ C. loads 4	4,034¾ C. loads 2,570	624 H. loads 167	764½	620½ ... ...

* The Deputy Conservator reports that no book is kept for free pass.

No. 6.—*Statement showing the Quantity and Valuation of Timber Stock at the commencement and close of the Year* 1880-81.

Divisions.	Teakwood.												Ebony or Blackwood.		
	At the Sale Depôt.						Outside the Sale Depôt.						At the Sale Depôt.		
	At the commencement of the year.			At the close of the year.			At the commencement of the year.			At the close of the year.			At the commencement of the year.		
	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.
	Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.	
			Rs.			Rs.			Rs.			Rs.			Rs.
Goomsur and Suradá ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	..	..	...	...	...	...	...	...	...	...
Kurnool	...	...	...	1,584	...	343	...	...	...	...	...	...	...	...	...
North Arcot	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...
South Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	226	2,931	1,099	218	2,097	988	...	...	...	...	...	...	...	...	...
Coimbatore	16	25,408	46,065	...	70,908½	57,219	107	63,931¾	38,005	...	...	...	383	23,804¼	29,194
Nilgiri	...	3,486¼	5,230	...	...	...	...	48,984	33,056	...	46,244	31,027	...	...	...
Salem	...	...	...	...	69	86	...	...	...	...	...	...	...	...	...
South Canara	...	...	.	...	...	...	..	..	...	...	...	...	...	...	..
Wynaad	...	8,520	9,658	...	1,449¼	1,362	...	27,915½	14,092	...	25,348⅝	11,291	...	200¾	296
Nilambúr	1,153	16,705	9,804	487	10,625	10,625	...	...	...	...	...	...	156	3,195	2,009
	Saplings	4,201	2,100	...	332	200	...	14,229	2,042	..	21,986	20,000	...	...	...
Pálghat	...	96	96	...	5	5	...	314	314	...	141	106	...	37	37
Total ...	1,395	57,146½	74,052	2,289	85,153¾	70,828	107	141,145¼	87,509	...	71,733⅝	62,424	539	27,237	31,536
	Saplings	4,201	...	...	332	...	...	14,229	...	...	21,986	...	...	...	...

No. 6.—*Statement showing the Quantity and Valuation of Timber Stock at the commencement and close of the Year* 1880-81—(Continued).

Divisions.	Ebony or Blackwood—(*Continued*).						Rosewood.					
	At the Sale Depôt—(*Continued*).			Outside the Sale Depôt.			At the Sale Depôt.					
	At the close of the year.			At the commencement of the year.			At the close of the year.			At the commencement of the year.			At the close of the year.		
	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.
	Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.	
			Rs.			Rs.			Rs.			Rs.			Rs.
Goomsur and Suradá	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	..	...	...	...	...	...	...	..	...	...	...	...
Tinnevelly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore	133	23,462¼	28,100	5	5,948¾	4,923	...	...	...	...	...	...	...	...	...
Nilgiri	...	..	...	...	285	107	...	200	75	...	...	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Canara	...	...	...	...	...	...	..	..	...	...	...	...	...	...	...
Wynaad	...	7	8	...	453½	170	...	...	...	...	...	...	...	...	...
Nilambúr	33	1,196	1,196	...	...	...	...	...	...	...	...	...	...	...	...
Pálghat	..	...	...	...	63	10	...	43	7	...	...	..	...	...	...
Total ...	166	24,665¼	29,304	5	6,750¼	5,210	...	243	82	...	...	...	...	...	..

No. 6.—*Statement showing the Quantity and Valuation of Timber Stock at the commencement and close of the Year* 1880-81—(Continued).

Divisions.	Rosewood—(*Continued*).						Sandalwood.						Red Sander's Roots or Parts.					
	Outside the Sale Depôt.						At the Sale Depôt.						At the Sale Depôt.					
	At the commencement of the year.			At the close of the year.			At the commencement of the year.			At the close of the year.			At the commencement of the year.			At the close of the year.		
	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.
	Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.			Mds.		Logs or Pieces.	Maunds.		Logs or Pieces.	Cubic Feet.		Posts.	Tons.	
			Rs.			Rs.			Rs.			Rs.			Rs.			Rs.
Goomsur and Suradá ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
Cuddapah	...	...	...	...	..	...	...	...	...	...	...	...	...	...	..	6	...	18
Kurnool	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
North Arcot	...	...	...	...	...	...	...	353	353	...	979	979	...	...	...	...	..	...
South Arcot	...	...	...	...	...	...	...	11	55	...	9	32	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	.	...	...	...	..	..	...	...	...	...	...	...	...	...	..	...
Tinnevelly	...	...	...	...	..	...	...	...	...	...	..	...	...	...	...	...	..	...
Coimbatore	...	...	...	...	...	...	...	227	468	...	2,303½	6,471	...	...	...	...	...	...
Nílgiri	...	...	..	...	...	...	...	..	...	...	...	...	...	...	...	...	...	..
Salem	...	...	...	...	...	...	...	*82	460	...	325	1,625	...	...	...	...	...	
South Canara	...	...	...	...	...	...	...	...	...	...	...	..	...	...	..	..	..	.
Wynaad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nílambúr	...	..	...	...	..	...	...	..	...	...	...	...	...	...	...	...	...	..
Pálghat	...	...	..	...	...	...	...	...	...	...	...	...	...	...	..	..	...	...
Total ...	...	...	.	...	..	...	...	673	1,336	...	3,616¼	9,107	...	..	..	6	...	18

* Last year it was calculated that 25 lb. make one maund, and this year it is settled by the Conservator that 28 lb. make one maund (Conservator's letter No. 1,219. dated 17th February 1881.) Hence decrease in the stock.

No. 6.—*Statement showing the Quantity and Valuation of Timber Stock at the commencement and close of the Year* 1880-81—(Continued).

Divisions.	Other Jungle wood.											
	At the Sale Depôt.						Outside the Sale Depôt.					
	At the commencement of the year.			At the close of the year.			At the commencement of the year.			At the close of the year.		
	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.
	Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.		Logs or Pieces.	Cubic Feet.	
			Rs.			Rs.			Rs.			Rs.
Goomsûr and Suradá	966	3,412	2,611	3,043	12,907	8,038	32	892	184	32	892	184
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	32	Sq. ft. 560	64	...	...	...	...	...	...
North Arcot	...	39¼	40	...	...	...	...	...	...	...	...	...
South Arcot	*586	1,478	803	609	1,679	907	*92	495	193	183	826	298
Trichinopoly	...	.	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevelly	1,909	6,331	4,735	1,888	6,784	4,403	...	...	...	...	.	...
Coimbatore	...	3,582	2,303	...	8,055	3,818	...	5,410	2,077	...	..	...
Nílgiri	...	..	...	...	...	...	...	760	143	...	500	94
Salem	341	1,527	1,153	...	752	872	...	...	...	..	...	..
South Canara	...	...	...	...	...	...	1,102	25,342½	9,742	77	1,633	19
Wynaad	...	1,505¼	915	...	1,505¼	915	...	1,736	446	...	1,734¾	495
Nilambúr	1,177	23,321	5,364	407	14,876	3,719	..	...	...	...	...	...
Pálghat	...	77	8	...	1,572	530	...	5,505	2,150	...	4,875	1,620
Total ...	4,979	41,273	17,932	5,979	48,130¼ Sq. ft. 560	23,266	1,226	40,140½	14,935	292	10,460¾	2,710

* Valuation revised.

No. 6.—*Statement showing the Quantity and Valuation of Timber Stock at the commencement and close of the Year* 1880-81—(Continued).

Divisions.	Bamboos.												Railway Fuel or Firewood.					
	At the Sale Depôt.						Outside the Sale Depôt.						At the Sale Depôt.					
	At the commencement of the year.			At the close of the year.			At the commencement of the year.			At the close of the year.			At the commencement of the year.			At the close of the year.		
	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.	Quantity.		Valuation.
	C. loads.	Number.		C. loads.	Number.		Cart loads.	Number.		Cart loads.	Number.		Tons.	C. loads.		Tons.	C. loads.	
			Rs.			Rs.			Rs.			Rs.			Rs.			Rs.
Goomsur and Suradá ...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...
Cuddapah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
North Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	428	428
South Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	..
Madura	...	...	...	...	...	...	...	...	...	...	...	...	8½	...	30	Pieces 52 7½	...	33
Tinnevelly	2½	...	24	7½	...	91	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...
Nilgiri	...	...	...	...	...	...	...	...	...	...	...	...	...	71	204	...	169	486
Salem	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
South Canara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Wynaad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nilambúr	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
Pálghat	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	2½	...	24	7½	...	91	...	...	...	...	...	...	8½	71	234	Pieces 52 7½	597	947

No. 6.—*Statement showing the Quantity and Valuation of Timber Stock at the commencement and close of the Year* 1880-81—(Continued).

Divisions.	Forest Produce.						Totals.			
	At the Sale Depôt.						At the Sale Depôts.		Outside the Sale Depôts.	
	At the commencement of the year.			At the close of the year.			Valuation.		Valuation.	
	Quantity.		Valuation.	Quantity.		Valuation.	At the commencement of the year.	At the close of the year.	At the commencement of the year.	At the close of the year.
	Maunds.			Maunds.						
			Rs.			Rs.	Rs.	Rs.	Rs.	Rs.
Goomsur and Suradá	...	...	...	...	...	...	2,611	8,038	184	184
Cuddapah	...	...	...	...	...	...	...	18	...	.
Kurnool	562⅔	...	282	617½	...	309	282	716	...	.
North Arcot		...	...	...	...	...	393	1,407		..
South Arcot	...	lb. 5	2	94¼	...	54	860 (*a*)	993	193 (*a*)	298
Trichinopoly	...	...	...	...	...	–	*Nil.*	*Nil.*	.	...
Madura	...	...	...	.	...	. .	30	33	.	...
Tinnevelly	...	Tols. 1,397½ Mds. 51$^{3}/_{16}$	606	2,050 852	...	898	6,464	6,380	.	...
Coimbatore	...	...	...	...	...	...	78,030	95,608	45,005	.
Nilgiri	...	...	...	...	...	...	5,434	486	33,306	31.196
Salem	...	...	.	...	...	...	1,613	2,583		
South Canara	...	. .	. .	...	...	. .	...	...	9,742	19
Wynaad	...	.	143	...	...	111	11,012	2,396	14,708	11,786
Nilambúr	...	.	...	...	...	...	19,277 (*b*)	15,740	2,042 (*b*)	20,000
Pálghat	...	...	...	...	...	...	141 (*c*)	535	2,474 (*c*)	1,733
Total ...	562⅔	Tols. 1,397½ Mds. 51$^{3}/_{16}$ lb. 5	1,033	1,564$^{7}/_{20}$ Tols. 2,050	...	1,372	1,26,147	1,34,933	1,07,654	65,216

(*a*) Closing Stock of 1879-80 revised.
(*b*) Closing Stock of 1879-80 exhibited in the Statement of 1879-80 under "Sale Depôt" was distributed between the 'Sale Depôt' and 'outside the Sale Depôt.' Hence discrepancy.
(*c*) It is reported that the difference between the figure here exhibited and that shown as closing stock in the statement of 1879-80 is due to omission in the last year's statement.

No. 7.—Detailed Statement showing the Receipts of the Forest Department in the Madras Presidency for the Official Year 1880-81.

Receipts.	Ganjam.	Godávari.											Malabar.			
	Goomsur and Surada.	Bhadráchalam.	Cuddapah.	Kurnool.	North Arcot.	South Arcot.	Trichinopoly.	Madura.	Tinnevelly.	Coimbatore.	Nilgiris.	Salem.	South Canara.	Wynaad.	Nilambúr.	Pálghat.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—																	
(a) Timber	5,618	...	33,965	...	7,576	2,387	...	...	10,223	27,496	7,989	1,852	260	16,186	62,922	7,103	1,83.577
(b) Firewood and charcoal	...	...	25	...	5,985	1,427	...	546	...	609	1,498	..	...	.	534	732	11,356
(c) Bamboos	...	...	180	...	191	21	4	...	158	2	...	41	36	519	816	88	2,056
(d) Sandalwood	...	...	...	...	4,195	2,449	...	...	...	18,454	3,167	10,000	..	...	...	...	38,265
(e) Grass and other minor produce	...	...	...	...	38	76	...	3,609	5,094	572	368	295	152	676	.		10,880
II. Timber and other produce removed from the forests by consumers or purchasers—																	
(a) Timber	21,385	19,379	10,313	13.703	2,780	555	204	6,588	1,906	2,714	288	4,009	80	...	...	17	83,921
(b) Firewood and charcoal	912	95	21,669	1,232	2,936	2,816	1,625	6,933	6,098	10,515	5,526	12,499	55	...	...	...	72.911
(c) Bamboos	...	...	1,987	3,300	10,381	1,236	51	2,172	348	12,548	4	11,070	211	...	...	...	43,308
(d) Grazing and fodder grass	...	...	108	705	...	...	1,163	...	..	1,284	...	.	...	...	...	...	3,260
(e) Other minor produce	17	1,856	1,117	331	785	1,142	68	2,027	2,471	4,553	20	14,257	24	...	...	...	28,668
III. Confiscated drift and waif wood	81	...	928	1,045	13	44	...	272	277	229	2	569	67	...	...	...	3,527
IV. Revenue from forests not managed by Government—																	
(a) Duty on foreign timber and other forest produce	.	..	...	...	...	...	..	...	...	..	...	...	...	...	...	...	...
(b) Revenue from shared and private forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
V. Miscellaneous—																	
(a) Fines and forfeitures	...	103	...	...	...	...	...	...	19	...	...	3	...	43	..	...	168
(b) Refunds	...	38	...	147	8	...	403	355	286	601	139	447	...	669	286	...	3.379
(c) Other sources	...	...	36	71	...	29	107	167	235	320	...	129	4	...	335	6	1,439
Total Receipts	28,013	21,471	70,328	20,534	34,888	12,182	3,625	22,669	27,115	79,897	19,001	55,171	889	18,093	64,893	7,946	*4,86,715

* Of this Rupees 6,936-10-4 being the value of timber, &c., supplied to Department of Public Works and other departments as specified hereunder:—

	Department of Public Works.	Other Departments.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Goomsur	2,471 0 4	...	2,471 0 4
North Arcot	.	1,310 7 11	1,310 7 11
Coimbatore	...	1,726 3 8	1,726 3 8
Salem	.	131 7 7	131 7 7
Nilgiris	730 12 0	54 0 0	784 12 9
Wynaad	...	433 14 0	433 14 0
Pálghat	..	78 12 10	78 12 10
Total	2,201 12 14	3,734 14 0	6,936 10 4

No. 7.—*Detailed Statement showing the Charges under A, Conservancy and Works of the Forest Department in the Madras Presidency for the Official Year* 1880-81.

Expenditure.	Ganjam.	Godávari.												Malabar.			
	Goomsur and Surada.	Bhadráchálam.	Cuddapah.	Kurnool.	North Arcot.	South Arcot.	Trichinopoly.	Madura.	Tinnevelly.	Coimbatore.	Nilgiris.	Salem.	South Canara.	Wynaad.	Nilambúr.	Pálghat.	Total.
A. Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the Forests by Government Agency—																	
(*a*) Timber	4,302	...	13,395	267	2,636	1,987	...	...	6,067	3,922	391	906	22	1,464	6,432	1,308	43,100
(*b*) Firewood and charcoal	...	...	...	...	1,318	...	...	314	...	427	1,198	...	...	...	..	..	3,252
(*c*) Bamboos	...	...	...	...	99	...	...	...	171	16	...	21	...	182	476	33	998
(*d*) Sandalwood	...	...	...	...	1,476	406	...	..	...	4,859	1,500	448	..	...	...	...	8,689
(*e*) Grass and other minor produce	...	...	...	20	...	104	...	2,510	2,410	130	18	101	31	67	...	...	5,391
II. Timber and other produce removed from the forests by consumers or purchasers	...	...	421	615	782	276	...	1,472	486	4,101	1,373	60	...	...	...	...	9,586
III. Confiscated drift and waif wood	59	396	46	396	20	55	...	63	30	17	...	1	...	...	...	...	1,083
IV. Revenue from forests not managed by Government—																	
(*a*) Duty on foreign timber and other forest produce.	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	..
(*b*) Revenue from shared and private forests	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
V. Rent of leased forests and payments to shareholders in forests managed by Government	...	..	...	...	...	...	...	...	...	...	3,500	...	...	...	349	...	3,849
VI. Live and dead stock—																	
(*a*) Purchase of cattle	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	..	
(*b*) Feed and keep of cattle	69	...	...	...	...	...	15	..	...	4,497	27	...	...	1,785	..	..	6,393
(*c*) Plant, tools, and instruments	...	...	...	34	22	56	5	36	21	113	134	...	14	3	257	13	708
VII. Communications and buildings—																	
(*a*) Roads and bridges	...	...	...	...	...	..	...	...	...	923	488	...	...	25	...	130	1,566
(*b*) Buildings	99	...	...	...	49	1,005	2	...	135	236	350	160	37	56	231	...	2,360
(*c*) Other works	...	...	...	...	...	142	...	50	...	416	...	66	...	...	...	...	674
VIII. Demarcation, improvement, and extension of forests—																	
(*a*) Demarcation	...	...	...	...	554	550	...	240	815	628	...	328	2,535	324	...	467	5,941
(*b*) Compensation for land and rights	...	...	...	...	...	50	...	..	...	...	...	...	...	...	...	...	50
(*c*) Surveys and working places	...	...	...	...	...	..	...	..	247	83	...	524	...	26	...	...	880
(*d*) Plantations	33	...	435	...	4,358	917	1,933	13	...	1,279	5,604	94	28	613	5,907	...	21,214
(*e*) Protection from fire	362	16	3,057	10	141	107	..	...	...	202	894	...	2	155	596	68	5,610
(*f*) Other works	...	...	...	...	180	2,395	972	454	614	354	...	622	143	6	1,568	211	7,519
IX. Miscellaneous—																	
(*a*) Refunds	170	...	...	107	...	...	...	342	233	72	...	...	...	525	...	852	2,301
(*b*) Law charges	...	...	...	...	...	...	...	...	...	250	...	...	...	36	...	...	286
(*c*) Other charges	...	...	...	...	91	19	...	5	195	443	...	...	3	...	...	...	756
Total A, Conservancy and Works	5,094	412	17,354	1,449	11,726	8,069	2,927	5,499	10,924	22,968	15,472	3,331	2,816	5,267	15,816	3,082	*1,32,206

* This is inclusive of book adjustment amounting to Rupees 94-12-3 as particularized below :—

	Rs.	A.	P.
Kurnool	34	4	0
South Arcot	4	2	0
Madura	35	11	0
Tinnevelly	20	11	3
Total	94	12	3

No. 7.—*Detailed Statement showing the Charges under A, Conservancy and Works, and B, Establishment and Contingencies of the Forest Department in the Madras Presidency for the Official Year* 1880-81.

Expenditure.	Madras.	Ganjam.	Godávari.											Malabar.			
	Central — Office.	Goomsur and Surada.	Bhadráchalum.	Cuddapah.	Kurnool.	North Arcot.	South Arcot.	Trichinopoly.	Madura.	Tinnevelly.	Coimbatore.	Nilgiris.	Salem.	South Canara.	Wynaad.	Nilambár.	Pálghat.	Total.
B. Establishment and Contingencies.																		
I. Salaries—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*a*) Conservator	14,400	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14,400
(*b*) Superior Officers	13,659	...	2,356	4,200	3,000	4,200	3,000	2,000	4,200	4,200	7,567	7,540	1,779	210	3,877	5,200	...	66,988
(*c*) Subordinate Forest and Depôt Establishments	...	1,875	943	5,953	4,935	3,568	2,035	385	4,794	3,851	11,877	3,334	8,929	2,213	2,265	2,354	1,081	60,392
(*d*) Office Establishments	7,055	407	377	1,290	1,337	954	1,247	539	948	1,345	3,150	1,188	1,740	1,451	1,632	1,325	252	26,237
(*e*) Deputation and special allowances	...	...	840	...	...	...	840	586	...	1,200	10	...	326	...	900	140	66	4,908
II. Travelling Allowances—																		
(*a*) Conservator	2,810	...	...	...	...	...	...	...	...	...	...	...	...	..	...	..	...	2,810
(*b*) Superior Officers	1,864	...	1,825	1,800	1,736	2,100	2,132	1,500	1,890	1,800	2,200	1,619	1,605	34	1,896	1,638	..	25,639
(*c*) Subordinate Forest and Depôt Establishments	...	488	...	698	755	692	279	100	462	275	2,175	442	959	846	90	185	146	8,592
(*d*) Office Establishments	791	27	...	48	...	63	44	51	78	200	157	...	117	227	...	20	29	1,852
III. Contingencies—																		
(*a*) Stationery	...	...	31	3	...	5	12	2	...	22	28	...	12	...	10	6	...	131
(*b*) Carriage of tents and records	108	...	2	11	86	5	47	3	13	105	99	...	52	83	40	...	...	654
(*c*) Rents, rates, and taxes	464	...	3	...	36	24	...	...	...	...	...	1,050	...	...	...	...	...	1,577
(*d*) Pay of Police guards	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	..
(*e*) Official postage	379	41	47	116	83	100	115	45	193	198	207	25	171	85	25	42	10	1,882
(*f*) Sundries	2,044	95	32	498	63	125	75	20	144	40	208	100	73	85	94	35	..	3,731
Total B, Establishment and Contingencies ...	43,574	2,933	6,456	14,617	12,031	11,836	9,826	5,231	12,722	13,236	27,678	15,298	15,763	5,234	10,829	10,945	1,584	2,19,793
Total of A, Conservancy and Works ...	...	5,094	412	17,354	1,449	11,726	8,069	2,927	5,499	10,924	22,968	15,472	3,331	2,816	5,267	15,816	3,082	1,32,206
Grand Total of all Expenditure ...	43,574	8,027	6,868	31,971	13,480	23,562	17,895	8,158	18,221	24,160	50,646	30,770	19,094	8,050	16,096	26,761	4,666	*3,51,999

* This sum includes Rupees 43-3-0, being book adjustment as specified here below :—

	Rs.	A.	P.
Central Office	14	0	0
North Arcot	12	10	6
South Arcot	2	10	0
Coimbatore	3	9	6
Wynaad	10	5	0
Total ...	4	3	0

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue, dated 7th November 1881, No. 2642.

Forest Administration Report for 1880-81.

THOUGH dated as above this report did not reach the Board's Office till nearly three months later. The report being thus already overdue in the Government Office for the purposes of the Government yearly report (see G.O., dated 30th April 1879, No. 663, Public, Appendix B), the Board will not detain it for any lengthy review of the forest administration.

2. The total forest produce felled during the year 1880-81 is valued at Rs. 1,42,032 against Rs. 1,38,995 last year. The value of produce sold was Rs. 2,46,134 in 1880-81 against Rs. 1,93,962 last year. This considerable increase in sales was due in the main to an increased demand from Mysore for teak required for railway purposes. It was also due in part to the clearance of old stocks at reduced prices.

3. The total extent of fuel reserves was in 1880-81 160,201 acres, which is 2,189 acres less than the year before. Some reserves have ceased to be such, and in other cases figures had to be corrected. The revenue derived from these reserves was Rs. 18,259 against an expenditure of Rs. 6,383.

4. The total area under plantations was 8,820 acres, showing an increase of 133 acres, which represents the year's planting. The receipts from these amounted to Rs. 38,767 against Rs. 31,870 of charges.

5. The receipts from seigniorage on the license and voucher system of private felling amounted to Rs. 2,32,068, or Rs. 58,043 more than in the previous year. Sâl sleepers have been taken in large quantities under this system from the Goomsur and Suradá forests for railway works at Calcutta.

6. The total receipts of the Forest Department under all heads was Rs. 4,86,715 against Rs. 3,51,999 of charges, showing a surplus of Rs. 1,34,716. Taking into account the increases and decreases in the stock-valuation of timber, the net result was a surplus of Rs. 1,01,064.

7. The special party for selecting the sites of forest reserves completed their task in Madura, and the work was transferred to Salem, where it is now progressing.

(True Extract.)

(Signed) C. D. MACLEANE,
Acting Sub-Secretary.

ORDER—dated 10th July 1882, No. 722, Revenue.

Forest, No. 48.

Preliminary.—With their Proceedings read above, the Board of Revenue submit the Annual Administration Report of the Forest Department for 1880-81, with a very meagre review of their own. The report itself does not present a clear view of the operations of the department, and the voluminous statements annexed do not convey much information for review.

2. *Financial.*—From a financial point of view, the operations of the year were highly satisfactory, the receipts and charges being respectively Rs. 4,86,715 and

Rs. 3,51,999, leaving a surplus of Rs. 1,34,716 against Rs. 4,638, the average of the past six years. There has been on the whole a steady increase in the net profits of the department as the annexed table shows :—

Year.	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1874-75	3,64,326	3,97,872	— 33,546
1875-76	4,26,359	4,30,083	— 3,724
1876-77	4,15,312	4,13,970	+ 1,342
1877-78	4,04,164	3,82,493	+ 21,671
1878-79	3,83,878	3,43,789	+ 40,089
1879-80	3,83,224	3,81,228	+ 1,996
Total ...	23,77,263	23,49,435	+ 27,828
Average ...	3,96,210	3,91,572	+ 4,638
1880-81	4,86,715	3,51,999	+1,34,716

Taking the total decrease in stock into account, the net surplus is estimated at not less than Rs. 1,01,064. This amount is made up roughly of an increase of Rs. 1,03,000 in receipts and a decrease of Rs. 30,000 in expenditure as compared with the figures of the preceding year.

3. *Felling and Sale.*—The total valuation of timber, &c., felled and sold during the year amounted, respectively, to Rs. 1,42,032 and Rs. 2,46,134 against Rs. 1,38,995 and Rs. 1,93,962 in the preceding year. The fluctuations in these figures are explained in paragraphs 51—61 of the Conservator's Report. The Government note with satisfaction that felling operations were restricted to probable requirements and that the remarks made in G.O., 19th August 1881, No. 1220, have been attended to.

4. *Stock.*—The stock account discloses the following particulars :—

	Rs.
Value of Stock at the commencement of the year ...	2,33,801
Do. at the close of the year	2,00,149
Decrease ...	33,652

The decrease was chiefly in the marginally-noted districts, but no explanation is offered, though it is stated that the figure for the Coimbatore Division is likely to require revision. The deficiency is partly made up by increases in stock elsewhere, notably in Nilambúr, where a brisk demand for teak and saplings obtained during the year under review.

	Rs.
Coimbatore	27,427
Nílgiris	7,058
South Canara	9,723
Wynaad	11,538
Total ...	55,746

5. *Yield.*—As observed in G.O., 19th September 1881, No. 1220, paragraph 5, it is not easy to make out either from the Conservator's Report or from the statements appended to it, the total yield of the forests or the quantities of timber, &c., brought to market, the quantities being given in different denominations, and the statements being confused and unsystematic. The Government look for improvement in this particular in the report for 1882-83.

6. *Forest Reserves.*—As regards the area of forests reserved and demarcated during the year, the information furnished in the report is unsatisfactory.* Considerable progress was made in the selection and demarcation of reserves

* G.O., 28th April 1882, No. 433.

by Local Committees, consisting generally of a Revenue Divisional Officer and a Forest Officer; but no concise account of what has been done finds a place in the report.

7. Adverting to paragraph 22 of the Conservator's Report, it is observed that the reservation of 305½ square miles in the Madura Forests was sanctioned by G.O., 29th August 1881, No. 1284.

8. A short statement should be appended to future reports, showing in each district or forest division, the area of reserve sanctioned, and that actually demarcated and surveyed and constituted a close reserve. The progress made during the year under report should invariably be distinguished from that made up to its commencement.

9. *Fuel Reserves.*—As regards fuel reserves, the statement appended to paragraph 76 of the Conservator's letter shows the following results:—

			ACRES.
Total area reserved			160,201
Do. do. equal to fully stocked			62,418
			RS.
Receipts.	In the year		18,259
	To the end of the year		76,383
Charges.	In the year		6,383
	To the end of the year		1,64,947

The above figures are exclusive of those appertaining to the Cuddapah reserves which have been transferred to "Forest Reserves." This transfer also accounts for the decrease in the total extent of the Fuel Reserves which is nominal. The revenue realized, Rs. 18,259, shows a great improvement on that of the previous year, Rs. 12,354.

Paragraphs 13, 77 and 80.

10. *Plantations.*—The area of plantations was increased during the year by 133¼ acres, thus raising the aggregate area to Acres 8,820.* The Government learn with satisfaction that Ceara rubber and Mahogany seeds have germinated fairly in Cuddapah: Inga Saman unfortunately failed. It is not stated whether or not another experiment is contemplated. The Castilloa is favorably reported on. The growth of teak at Nilambúr continues to be all that can be desired.

*Timber	3,814
Mixed	1,227
Firewood	3,687
Experimental	90

11. The receipts and charges on account of plantations aggregated respectively Rs. 3,20,308 and Rs. 7,18,728 up to the end of the year under review. The expenditure during the year was Rs. 31,870, and the receipts 38,767 as against Rs. 36,416 and 31,631 in the preceding year.

12. Adverting to the Conservator's remarks in paragraph 127 of his report, regarding the proposed abolition of the license and voucher system in favor of departmental working in certain reserved forest tracts in Ganjam, the Government await the sketch map and particulars of the boundaries of the proposed reserves called for in G.O., 10th August 1881, No. 1169. Their submission should be expedited. It does not appear that the report called for by paragraph 8, G.O., 19th August 1881, No. 1220, has been submitted. Colonel Beddome's confidence that there was no danger of the Goomsur Forests being overworked has proved misplaced, and the increased demand for Sâl, anticipated by Government in their review of the Administration Report for 1879-80, has been at least as much as could be met.

13. The Conservator's remarks in paragraph 144, on the orders of Government regarding the boundary line between Tinnevelly and Travancore, are out of place in an Administration Report.

14. The particulars of the experiments made at the Gun Carriage Factory to test the quality of the Nilambúr plantation-grown teak, detailed in paragraph 161 and its annexures, are interesting and the results satisfactory.

15. With reference to his remarks in paragraph 103, the Conservator is referred to G.O., 2nd November 1881, No. 1630.

16. The experiments made for testing the tanning properties of wattle bark are sufficiently encouraging to justify further action. Some method of overcoming the difficulty experienced in breaking the bark might be devised by experts.

17. The statement in paragraph 8 shows that the Divisional Officers have generally devoted a fair proportion of their time to inspection tours.

(True Extract.)

(Signed) E. F. WEBSTER,
Secretary to Government.